

Study for Relocation of Section of Route US 6A
CONNECTICUT RIVER BRIDGE
MIDDLETOWN - PORTLAND

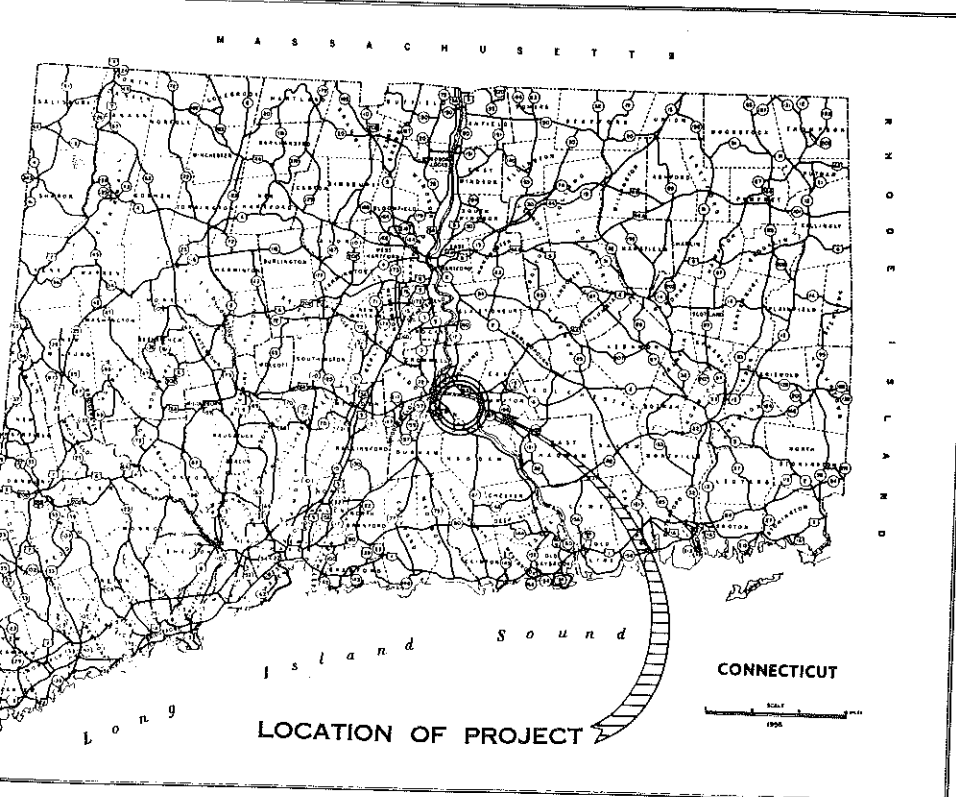
JOHN DEMPSEY

Governor

THE MIDDLESEX BRIDGE AND PORT AUTHORITY

Co-Chairman JOHN V. ANDERSON
JOHN W. BRADLEY
JOHN J. COONEY
SEWARD F. HULL

Co-Chairman RONALD J. MARKHAM
HAROLD L. STRICKLAND
DONALD THAYER
WILLIAM K. WASCH



CONNECTICUT STATE HIGHWAY DEPARTMENT

HOWARD S. IVES, Commissioner

Newman E. Argraves & Associates

TELEPHONE 874-4141

Engineers

CONSULTING-PLANNING & DESIGN
95 RIVER STREET
MILFORD, CONNECTICUT 06460

-2-

March 31, 1967

The Hon. Howard S. Ives
State Highway Commissioner
Connecticut State Highway Department
Wethersfield, Connecticut

Dear Sir:

In accordance with Paragraph 6 of our contract dated November 21, 1966 for engineering services, we are pleased to submit route selection studies and report in connection with the Connecticut River crossing of the proposed relocation of Route 6-A including approaches in Middletown and Portland. The investigation and study are made in accordance with the first sentence, Section 2 of the Special Act 266 of the 1965 Special Session of the General Assembly.

Several meetings were held with members of the State Highway Planning Division, the Director of Midstate Regional Planning Agency and members of the Middlesex Bridge and Planning Authority to determine the northern-most and southern-most boundries of the traffic corridor. It was decided to make Line B the southern-most route and Line C the northern-most route in the study.

To formulate the report we utilized 300' to the inch prints of aerial photography made in March of 1965 for use of State agencies. We also used contour data of the current available U.S.G.S. maps of the area. The Highway Department furnished "Two Way Average Daily Traffic of Crossings of Connecticut River in State of Connecticut" and the "Projected Two Way Average Daily Traffic for Year 2000".

We endeavored at the outset to find the most obvious route that would have the minimum R.O.W. impact, to provide an economical river crossing, would give reasonable traffic service to the main business section of Middletown, and provide a route in the general direction of Meriden and Willimantic (the nearest cities on the U.S. Federal Aid Route 6A). Several lines were studied and compared for the length of the river from Bodkin Rock to the narrows to determine feasible crossing locations from engineering, economic and esthetic standpoints.

Line A in this report begins at the north end of Pameacha Pond, crosses South Main Street, thence northeast over Main Street Extension (the ravine from South Main Street to Main Street Extension would have to be filled in and a culvert built to take the brook. There are trunk line sewers in this ravine which would require considerable change). From the intersection of Ridge Road and Main Street Extension the Line A (leaves Line C) curves to a southeasterly direction and continues over East Main Street, Wall Street, Frisbie Street, Bow Lane, and Route 9 Expressway, thence turns southeasterly entering the Connecticut Valley State Hospital grounds about at Tryon Hill. It then continues in an easterly direction and converges with Line B after going over

Bartholomew Road before reaching Reservoir Brook. Both Lines A and B then continue in a straight line and cross the Connecticut River just east of Bodkin Rock in Portland, thence continues along the south side of Straits Hill, thence crossing Portland-Cobalt Road (where the Expressway and 17 have a junction) continuing in an easterly direction south of Jobs Pond.

The cost estimate for Line A was based on an Urban (Residential) Type G, 6 lanes expandable facility, having an interchange at Route 9 with turning ramps for speeds up to 70% of the expressway design speed also having structures at the following locations:

SOUTH MAIN STREET (ROUTE 17)
LONG HILL BROOK
ENCLOSE SUMNER BROOK RAVINE IN TUNNEL
MAIN STREET EXTENSION
EAST MAIN STREET
WALL STREET
BOW LANE AND DENISON ROAD
TRYON STREET
ROUTE 9
POND STREAM
BARTHOLOMEW ROAD
RESERVOIR BROOK CULVERT
BOW LANE
INDIAN HILL BROOK
RIVER ROAD
NEW HAVEN RAILROAD
CONNECTICUT RIVER
ROUTE 6A
ROAD

ON ROUTE U.S. 17:
ROUTE US 6A AND ROAD
ROAD
RAILROAD

CONNECTOR:
BROOK STREET
ROAD
ROAD

Ramps to a reasonable number of local streets and an interchange at Route 6A, Portland.

Line B in this report begins at Randolph Road (Route 155) and runs in a northeasterly direction over the Route 9 Expressway, Saybrook Road just north of its intersection with Reservoir Road, thence over Bartholomew Road, then it converges with Line A previously mentioned and coincides with this Line A to the junction with Route 17 and along the south side of Jobs Pond.

The cost estimate for Line B is for the Class Urban (Residential) Type G, having an interchange at Route 9 just north of Randolph Road. The turning ramps would

(Continued)

be for speeds up to 70% of the expressway design speed, also having structures at the following locations:

RANDOLPH ROAD
ROUTE 9
ROUTE 9A
RESERVOIR ROAD
BARTHOLOMEW ROAD

The remainder of the line is exactly the same as for Line A.
Ramps to a reasonable number of local streets and an interchange at Route 6A, Portland.

Line C in this report begins at the north end of Pameacha Pond and coincides with Line A to Main Street Extension where Line C leaves Line A and continues in a northeasterly direction and crosses the Connecticut River at the narrows, continues over Riverside Avenue and Grove Street, thence easterly about 600' south of the existing 6A Expressway across Pecauset Pond and Meadows along the north side of Straits Hill where it has a junction with a proposed relocation of Route 17, thence Line C continues eastward over the Portland-Cobalt Road and south of Jobs Pond where it coincides with the alignment of Lines A and B.

The cost estimate for Line C was based on an Urban (Residential) Type G, 6 lanes expandable facility, having an interchange at Route 9 with turning ramps for speeds up to 70% of the expressway design speed also having structures at the following locations:

PAMEACHA POND AND AVENUE
SOUTH MAIN STREET (ROUTE 17)
WOODSIDE CIRCLE
ENCLOSE SUMNER BROOK IN CULVERT
MAIN STREET EXTENSION
EAST MAIN STREET
WALNUT AVENUE
ROUTE 9
BROOK
ASYLUM STREET
RAILROAD
RIVER ROAD
CONNECTICUT RIVER
RIVERSIDE AVENUE
BROOK CULVERT
GROVE STREET
PECAUSETT POND CULVERT
BROOK CULVERT
ROUTE 6A
ROAD

ON ROUTE 17:

ROAD
6A
RAILROAD

Ramps to a reasonable number of local streets and an interchange at Route 6A, Portland.

Another crossing that would go between the radio tower (WCNX) and Silvermine Hall (Connecticut Valley Hospital) in Middletown then cross the Connecticut River in a northerly direction and head directly toward Pecauset Pond across the Meadows

This line had many demerits such as requiring a very long river crossing bridge (much higher cost than other crossings), would require a very long trestle approach on the Portland, the subsurface material is not satisfactory for an economical foundation for a long span bridge since ledge is approximately 165' below the surface of the ground; also, the subsurface material is not satisfactory from an economical standpoint for piers for the approach trestle on the Portland side. Furthermore, this line would cross the Connecticut Valley Hospital grounds in a location which would interfere in a most harmful way to the hospital's planned expansion. Therefore, the line was not studied further.

BRIDGES

The selection of the proper bridge involves consideration of vertical and horizontal clearances in the river and also the esthetics problem. The arch bridge was selected as the most suitable to meet all the requirements. The arch bridge is designed as twin bridges, one twin carrying the four lanes of west bound traffic and the other twin carrying the four lanes of traffic east bound. The drawing shows them separated by only one inch but if preferred they could be separated to permit the lanes to line up with the rest of the highway with a median width of 80'.

The bridges are designed for H.S. 20-44 loading in accordance with standard specifications for Highway Bridges of the A.A.S.H.O. Eighth Edition. The Deck Slab 7-3/4" depth class F concrete composite with floor stringers.

The bridge deck should be constructed at the outset permitting travel in three lanes in each direction with the fourth lane and break-down lane constructed raised and having rumble strips to allow only slow speeds on them for safety.

The suspension bridge as an alternate has been included because for the Lines A and B crossing it may be less costly than the proposed arch. The suspension bridge also could be built as twin suspension bridges with the 80' wide median for very little additional cost.

Consideration should be given to the possibility of using 6" lightweight aggregate concrete deck slab composite with the steel stringer beams and the concrete slab to be topped with a 2" hot mix asphalt wearing surface. This lighter deck would save considerable in the cost of the steel structure.

sheet showing the schematic sketches of anticipated 1995 ADT volumes for interchanges on Line C and the sheet for the anticipated 1995 ADT volumes for interchanges on Line B show the high volume of traffic that would cross the river on Line C compared with the volume that would cross the river on Line B. This would be the case if the Arrigoni Bridge were an equal traffic capacity as the proposed new bridge.

The river crossing bridge is built on the alignment A & B and since the available capacity of the Arrigoni Bridge is estimated to be about 30,000 ADT, 1995 practically the same volume of traffic would be using the proposed bridge as would use the bridge on location C.

A major consideration is to provide a high standard expressway from Route 6A in Middlefield to Route 2 in either Marlborough or Colchester so that combined with the capacity of the Arrigoni Bridge, sufficient highway capacity across the river in the Middletown-Portland area will accommodate at least 73,000 ADT in 1995.

It is only about one mile farther via Route A or B than via Route C from the south end of the Middletown City business district and since the consideration would be the difference between 43,500 and 30,500 or 13,000 ADT per day in 1995 and assuming that the out-of-pocket cost to the vehicle owner is 5¢ per mile and this would amortize (over a period of 40 years at 4% interest) a capital cost of less than \$5,000,000.

In other words, from an economic standpoint, Line C could not be justified.

If Line B were used the traffic on the Route 9 expressway between the south end of the Middletown business district and the proposed interchange near Randolph would require the widening of that stretch of the existing expressway and the cost should be added to the Line B cost in comparing it with Line A.

A further study of the volume of traffic and other impact should be made before deciding on Line A or Line B. Both Line A and Line B join and are one and the same line from about Bartholomew Road in Middletown and across the Connecticut River and for the full length in Portland. Since this report is primarily to establish the line of the bridge crossing the Connecticut River, and since either Line A or B could be ultimately connected to the Bodkin Rock interchange, it is only necessary at this time to determine that either Line A or Line B will be the recommended line over Line C.

Order for the Middletown-Portland area and the other area east of the Connecticut River to keep pace with the economic development and growth of the remainder of the State, this facility and its approaches must be constructed at an early date.

If the State receives only a few million dollars a year from the Federal Government to be matched equally by state funds for this classification of roads, and considering that the expressway section between the present Route 6A in Middlefield and Route 9 in Middletown and the section from Route 6A in Portland and Route 2 in Marlborough or Colchester has to be completed to make this facility operate as anticipated; and, furthermore,

(continued)

the needs for the large number of projects under consideration for the other roads in this classification throughout the state, this means that for all intents and purposes all the funds for this project must be state funds.

We recommend that the Arch Bridge, located on alignment A & B crossing the river about 300' southeast of Bodkin Rock, be approved.

We recommend that the target date of 1975 for the completion of the construction of this facility be adopted. This would allow two years for the preliminary design of the bridge and establishing the location of the highway, 2½ years for engineering design and acquiring rights of way, and 2½ years to perform the construction.

1967-1969 - biennium \$400,000 for engineering.
1969-1971 - biennium \$2,600,000 for R.O.W. and engineering.
1971-1973 - biennium \$12,000,000.
1973-1975 - biennium \$35,000,000 (plus an amount necessary to widen the Route 9 expressway or build on Line A).

Property for the relocation of U.S. 6A should be acquired promptly. Vacant land within the proposed right of way should be taken as soon as the line has been filed. Occupied land should be taken on a program geared to the highway construction schedule, and in any case in advance of any building expansion or other improvement of the property.

We wish to acknowledge the assistance generously given us by the Highway Department Engineers and express our appreciation for their constructive recommendations which have been most helpful to us.

Respectfully submitted,

NEWMAN E. ARGRAVES & ASSOCIATES

Newman E. Argraves

Newman E. Argraves

NEA;ac;lae

COMPARISON OF LINES
MERITS

LINE A

LINE B

LINE C

0.60 miles shorter between terminal points than Line A and 0.80 miles shorter than B.

Displaces the lowest number of commercial and industrial enterprises.

Total R.O.W. & construction costs are least.

Least adverse R.O.W. impact.

Most desirable from an esthetics standpoint.

Most desirable from an esthetics standpoint.

Least adverse impact on wild life.

Least adverse impact on wild life.

Renders best traffic service for Middletown and Portland business centers.

Conforms with recommendations of Technical Planning Associates of 1965 Plan of Development for Portland & Middletown.

Advantageous for development of selected industries along expressway.

COMPARISON OF LINES
DEMERITS

LINE A

LINE B

LINE C

1) 0.60 miles longer between terminal points than Line C.

0.80 miles longer than Line C.

2) Takes out more industries than Line B.

Takes out more industries than Line A or B.

3) R.O.W. and construction costs greater than Line B.

R.O.W. and construction costs greater than Line A or Line B.

4) Renders a local traffic service less than Line C.

Renders a local traffic service slightly less than Line A and less than Line C.

5)

Less desirable from an esthetics standpoint.

6)

Will be most adverse from wild life standpoint, especially where it crosses the meadows.

7) Conforms only partly with recommendations of Technical Planning Association Report of June 1965, Plan of Development for City Planning Commission Middletown.

Does not conform with recommendations of Technical Planning Association Report of June 1965, Plan of Development for City Planning Commission Middletown.

8) Does not conform with recommendations of Technical Planning Association Report of Development for Portland 1965.

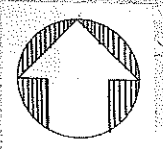
Does not conform with recommendations of Technical Planning Association Report of Development for Portland 1965.

COMPARISON OF LINES

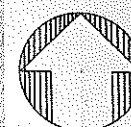
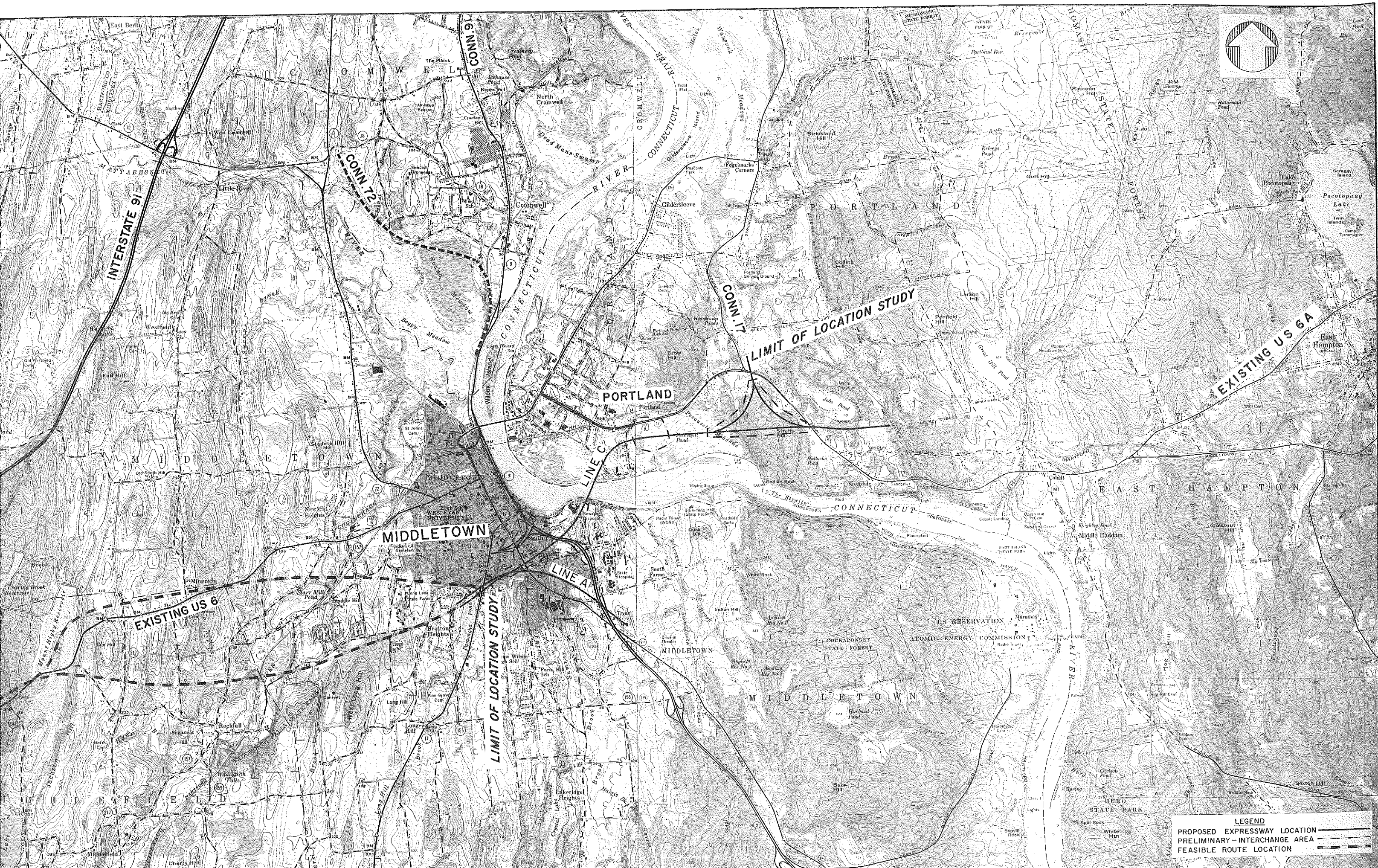
Line*	Length** Miles In Cost Est.	Cost (Thousands) dollars				Impact		
		R.O.W. & Utilities	Construction			Dwellings	Commercial & Industrial	Miscellaneous
			Conn. R. Br.	Other	Total			
60	4.43	8,200	31,000	22,300	61,500	232	14	1 church
60	3.35	3,500	31,000	15,500	50,000	43	7	
03	3.85	10,000	40,000	27,000	77,000	260	30	2 schools

Distance along feasible route from relocated 6A near Middlefield to 1500' east of the intersection of the route 6A and the proposed expressway alignment in Portland.

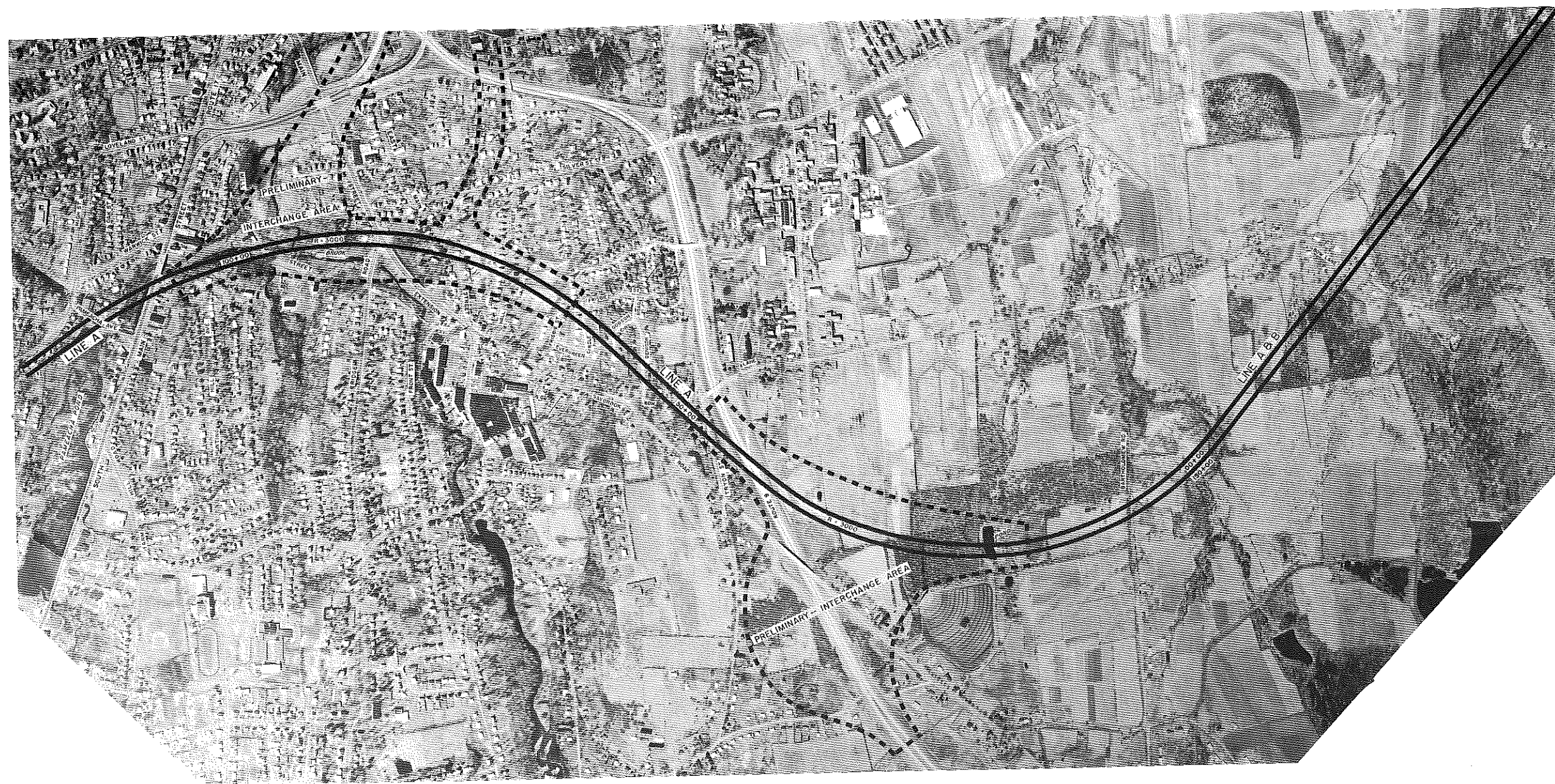
R.O.W. estimates were determined by referring to the assessed valuation of various parcels of property along the proposed alignments in the local assessor's office, then a factor that we deemed appropriate was applied.



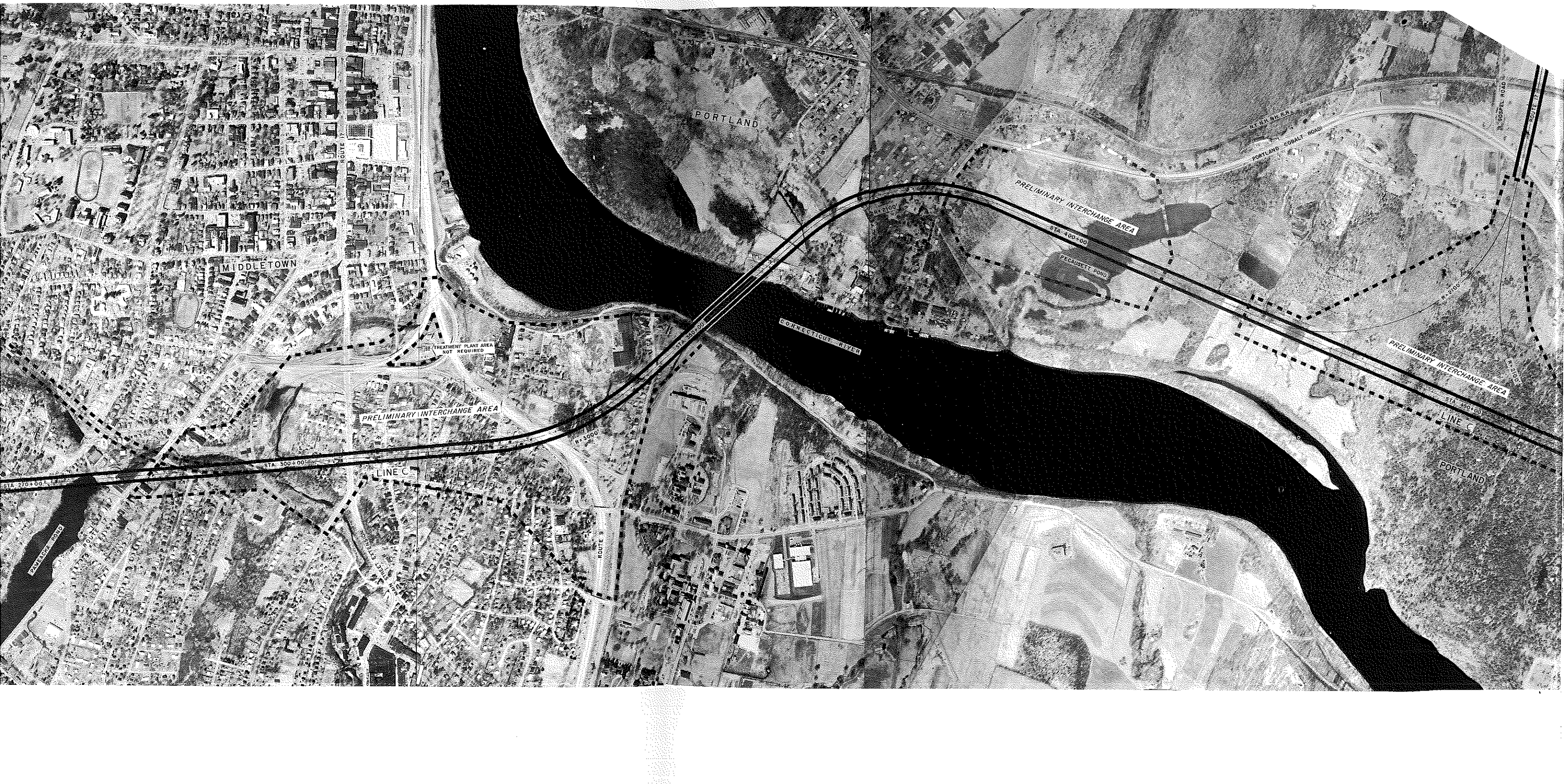
LEGEND
PROPOSED EXPRESSWAY LOCATION —————
PRELIMINARY-INTERCHANGE AREA - - - - -
FEASIBLE ROUTE LOCATION - - - - -

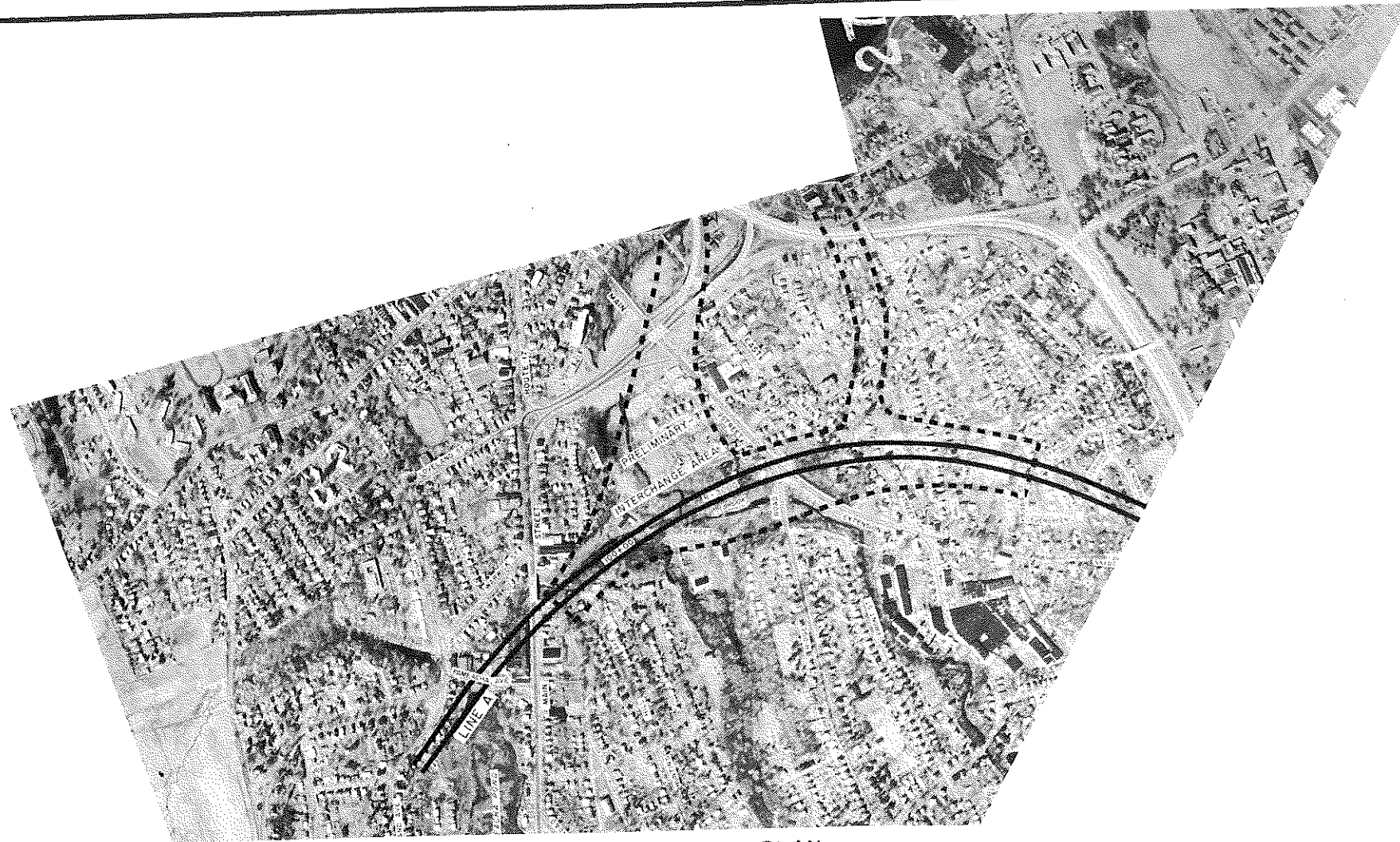


LEGEND
PROPOSED EXPRESSWAY LOCATION —————
PRELIMINARY-INTERCHANGE AREA - - - - -
FEASIBLE ROUTE LOCATION - - - - -

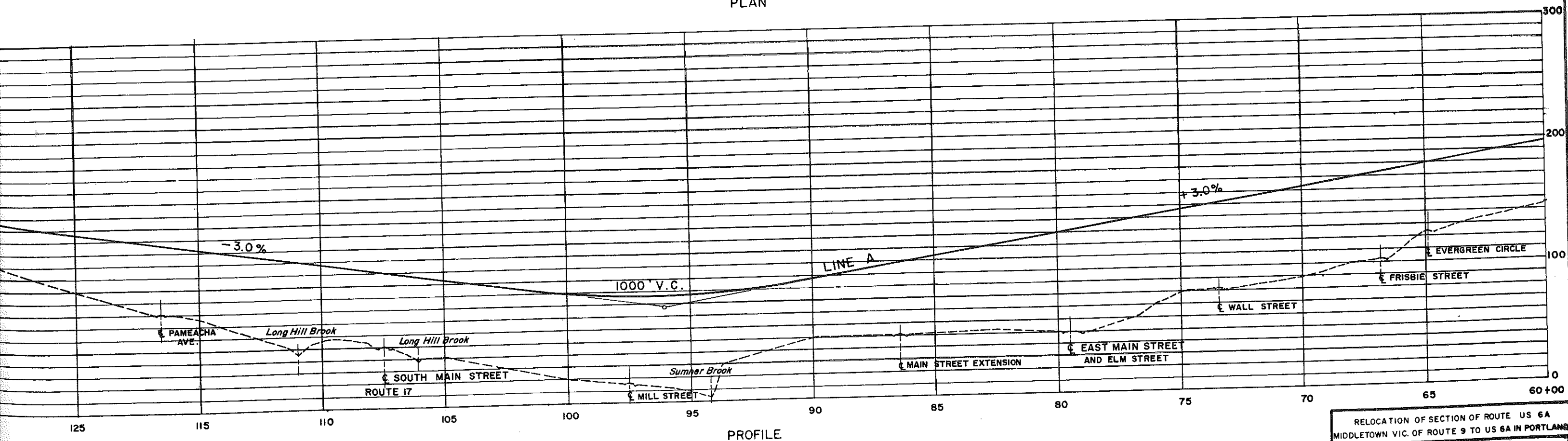








PLAN

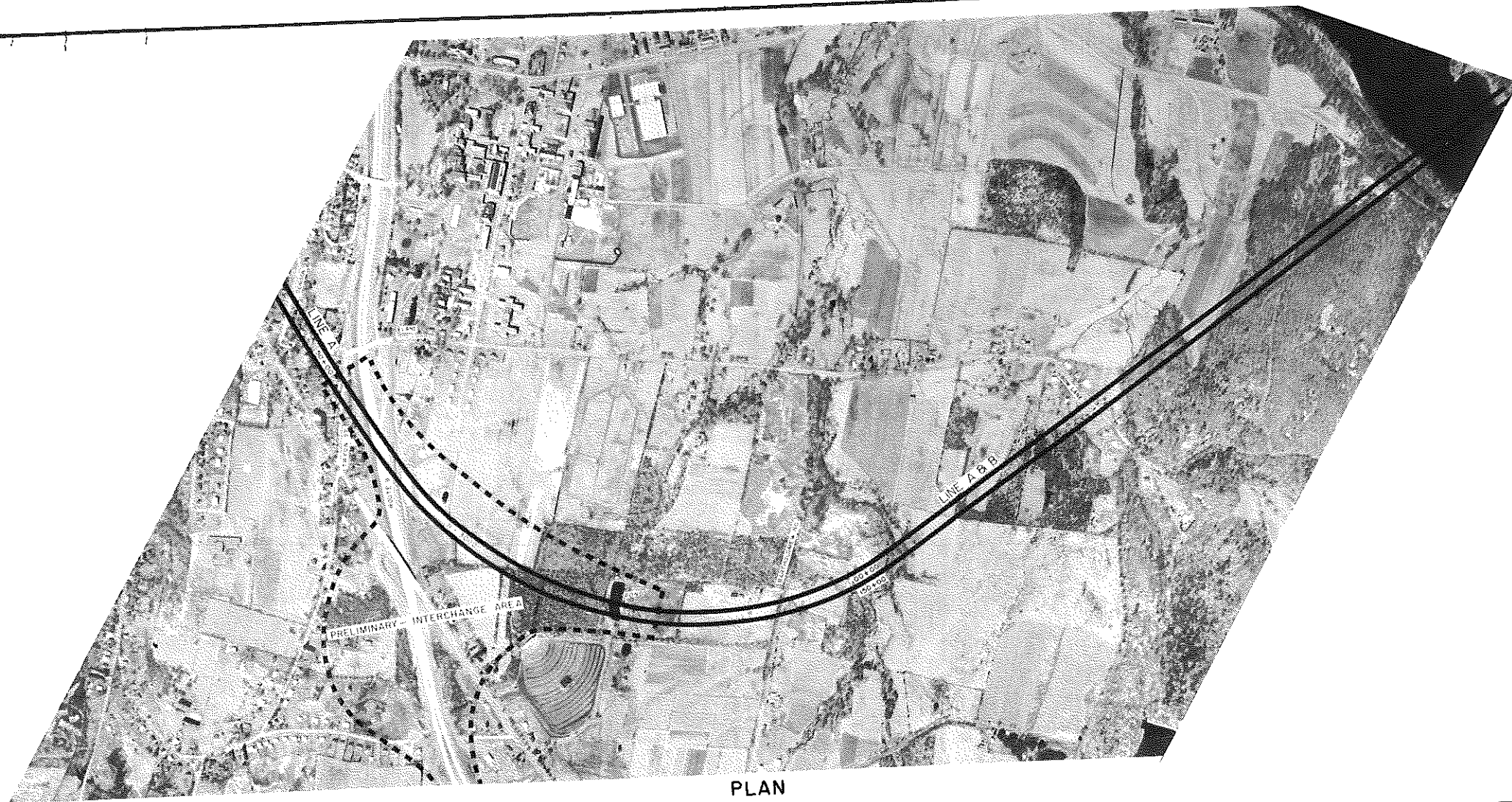


PROFILE

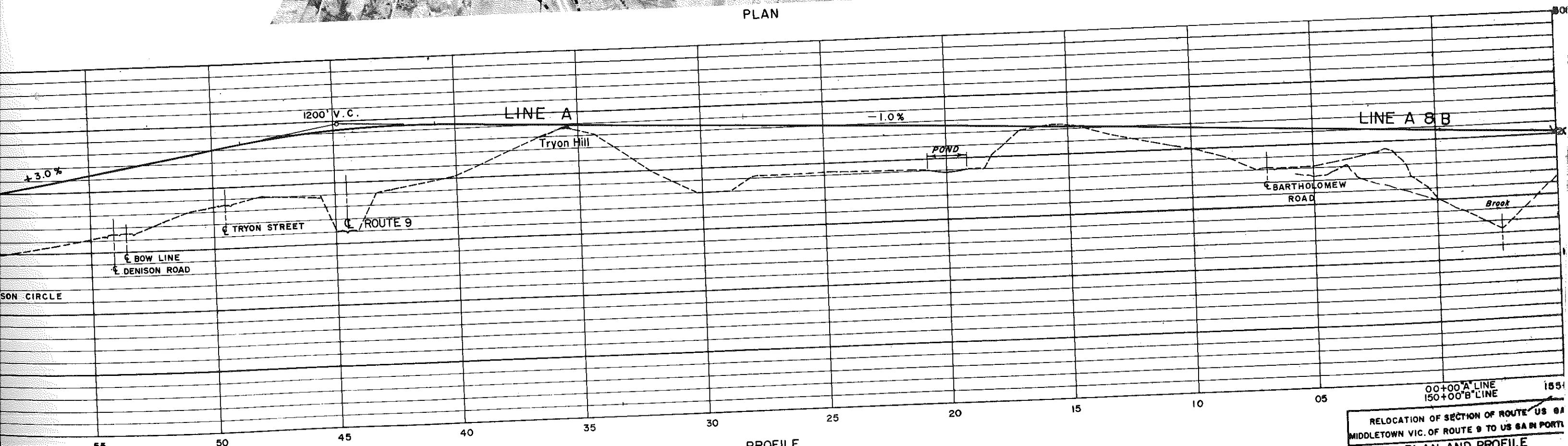
RELOCATION OF SECTION OF ROUTE US 6A
MIDDLETOWN VIC. OF ROUTE 9 TO US 6A IN PORTLAND

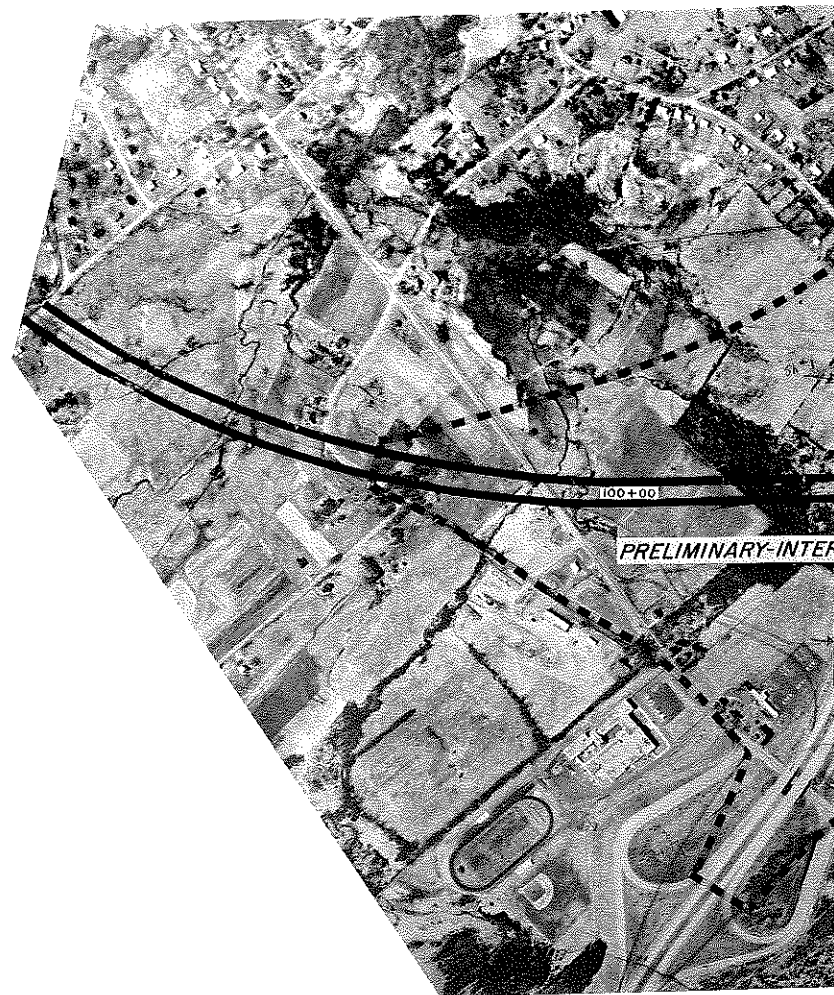
PLAN AND PROFILE
STUDY ALIGNMENT A

NEWMAN E. ARGRAVES & ASSOC. SCALE: Hor. 1"=200
DRAWN BY: J. MA

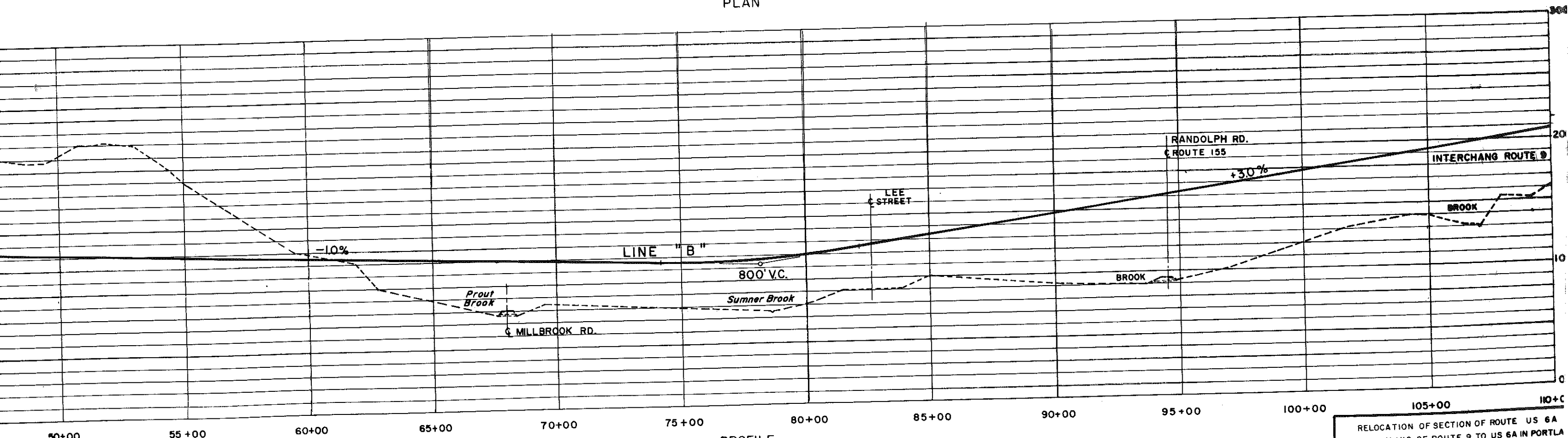


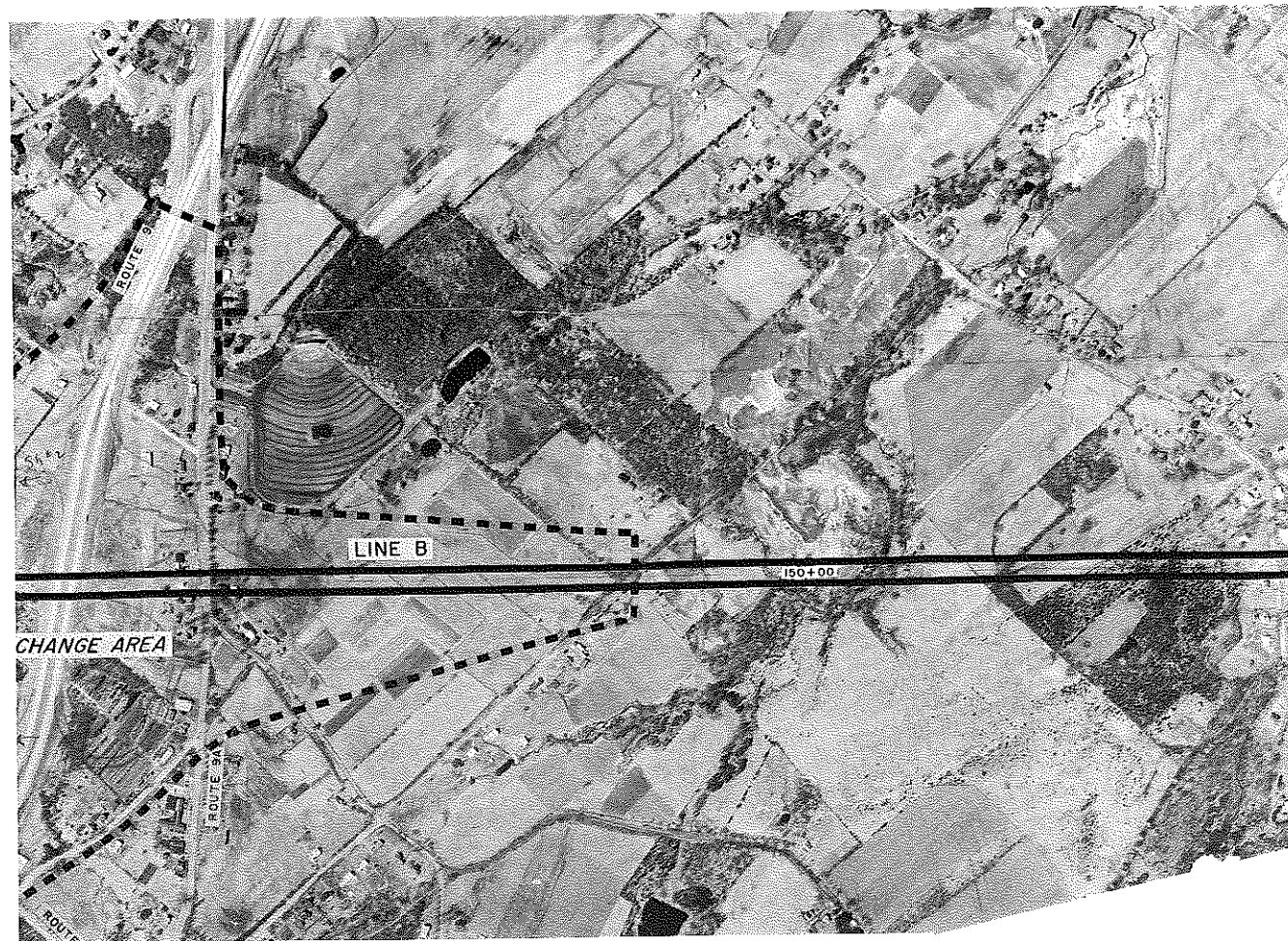
PLAN



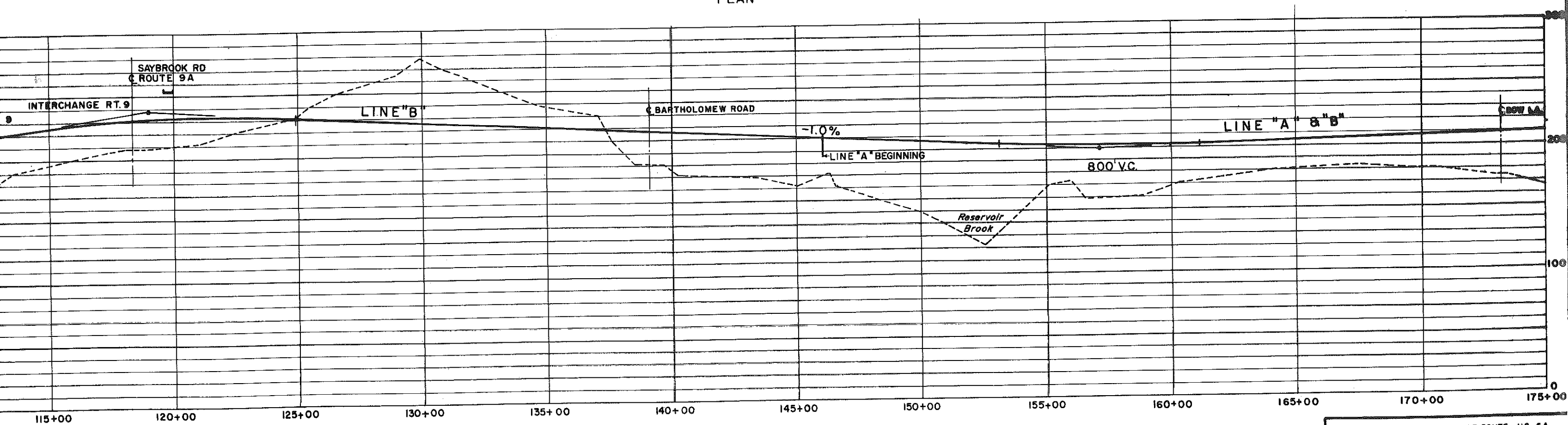


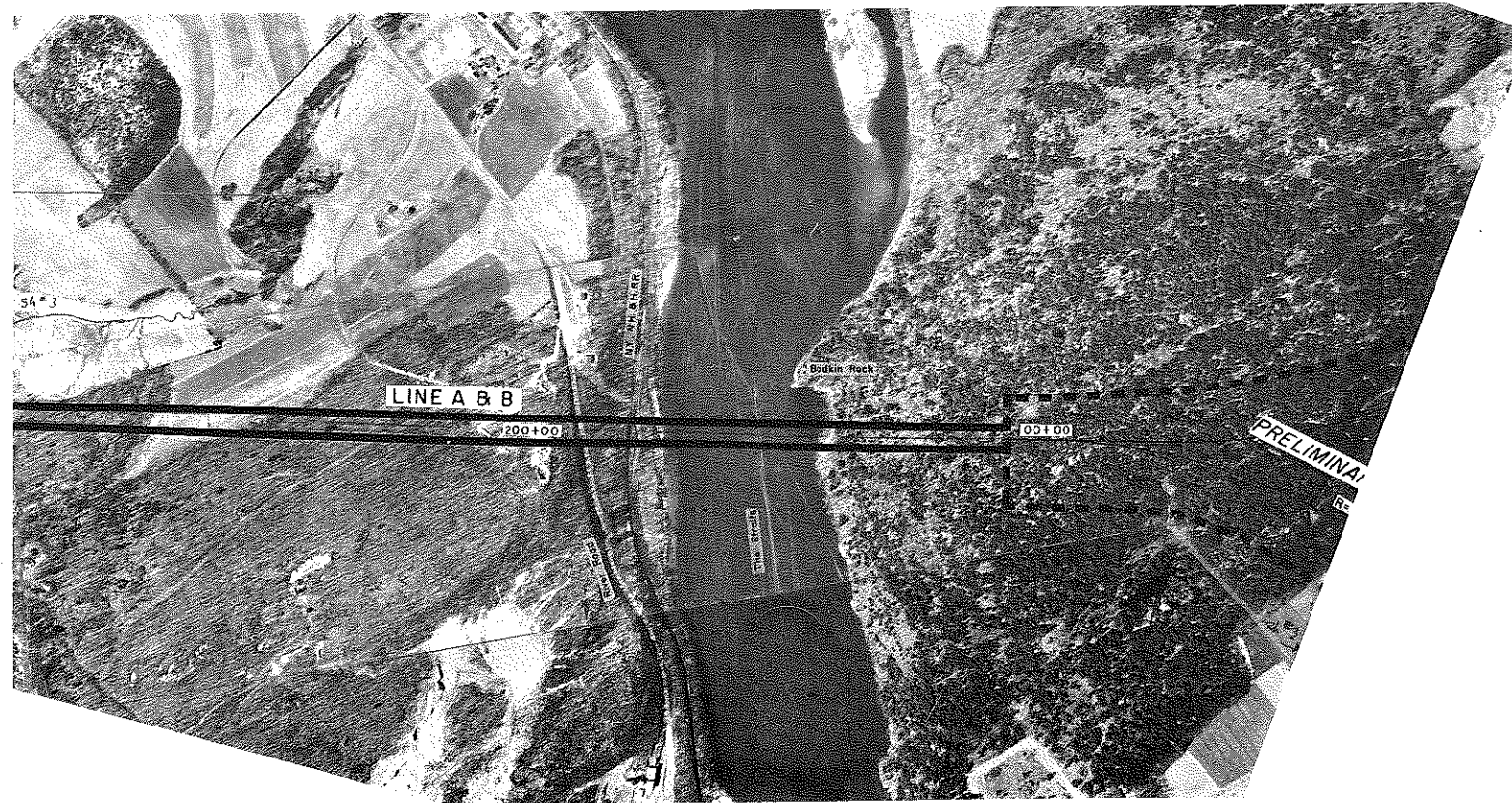
PLAN



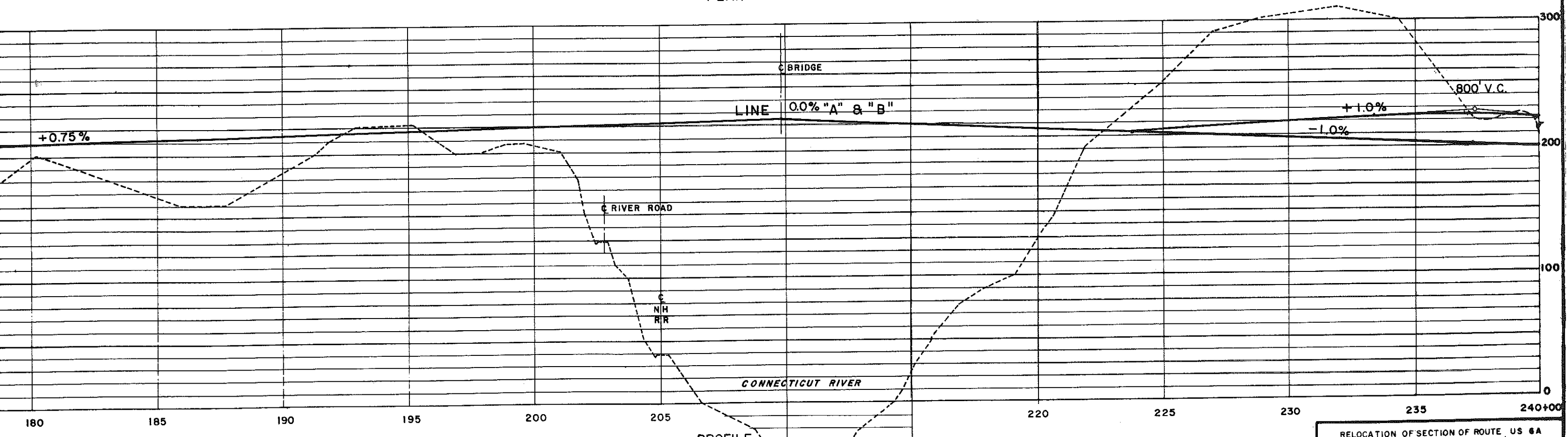


PLAN



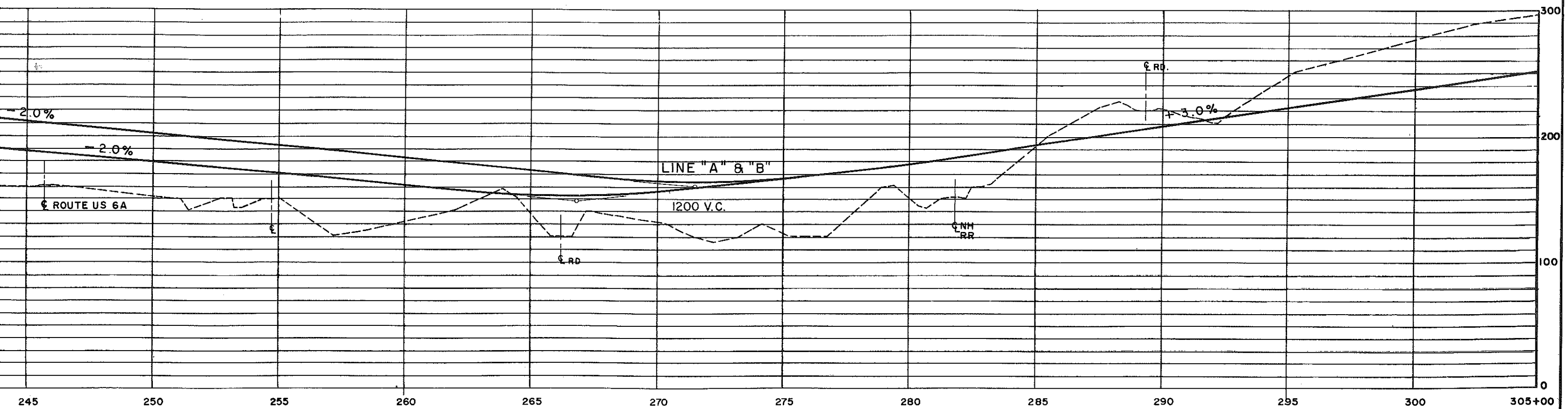


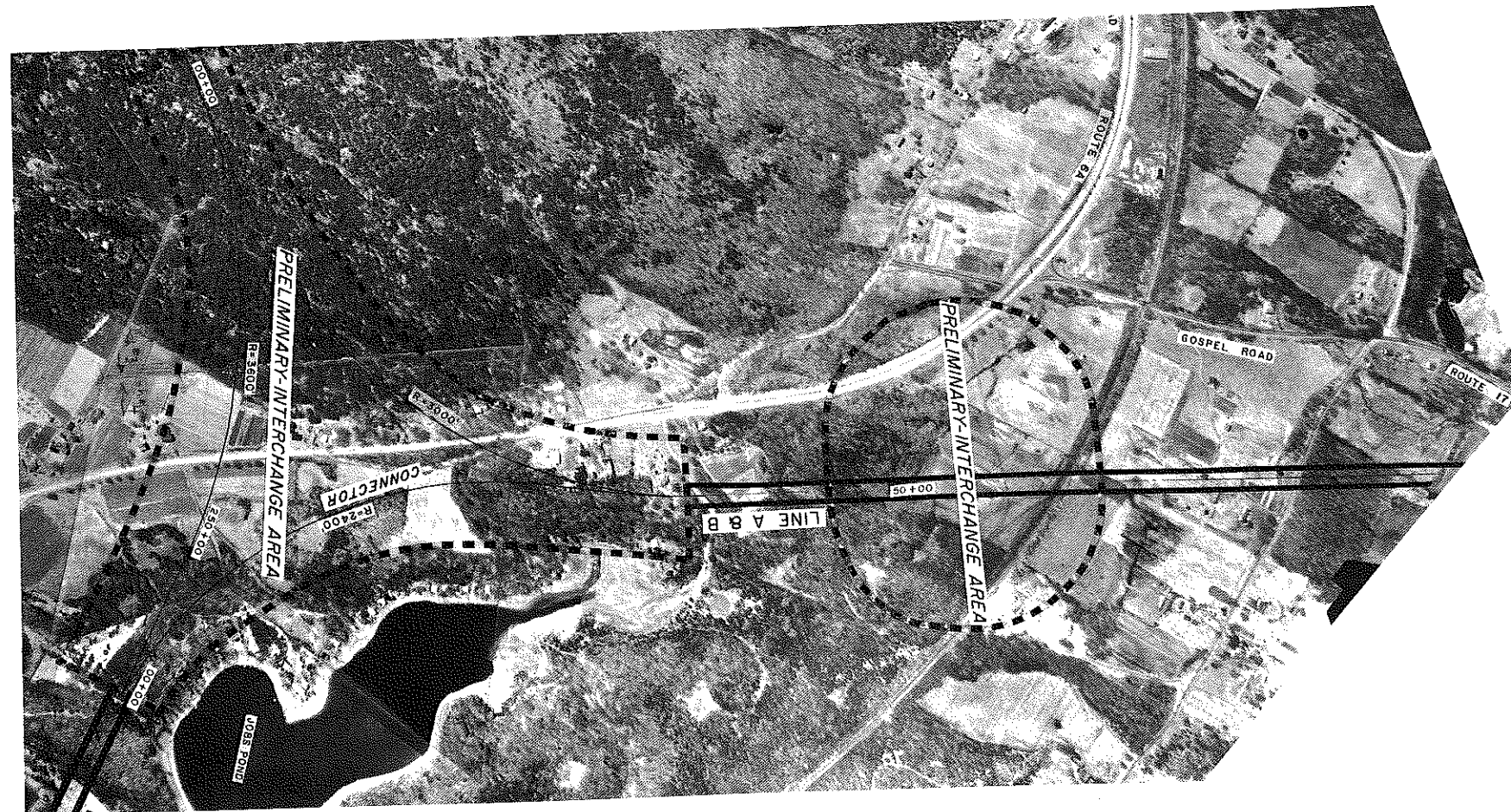
PLAN



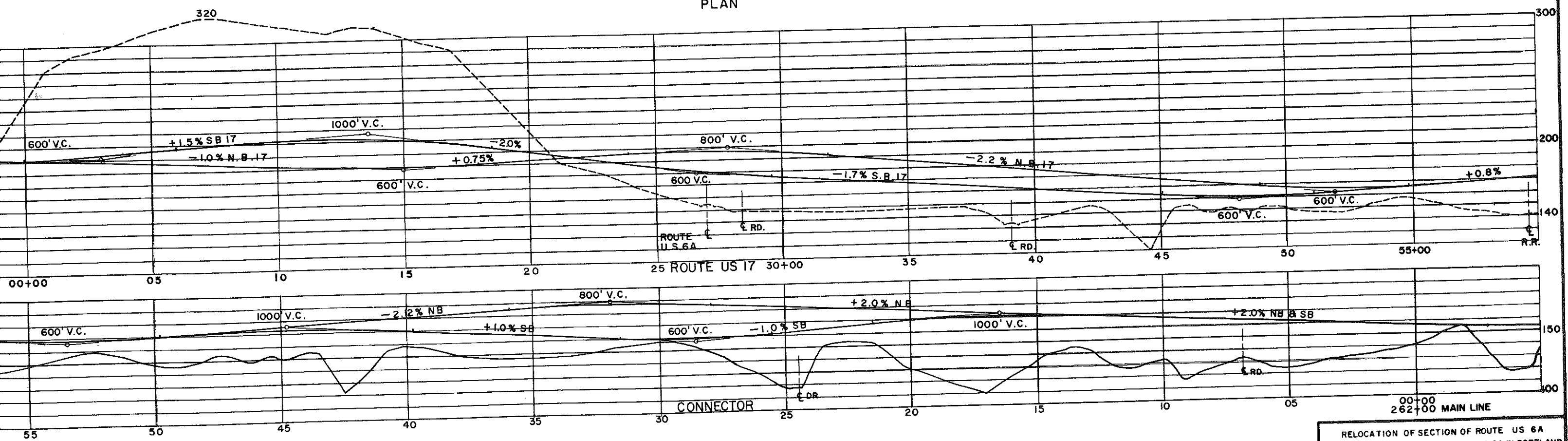


PLAN



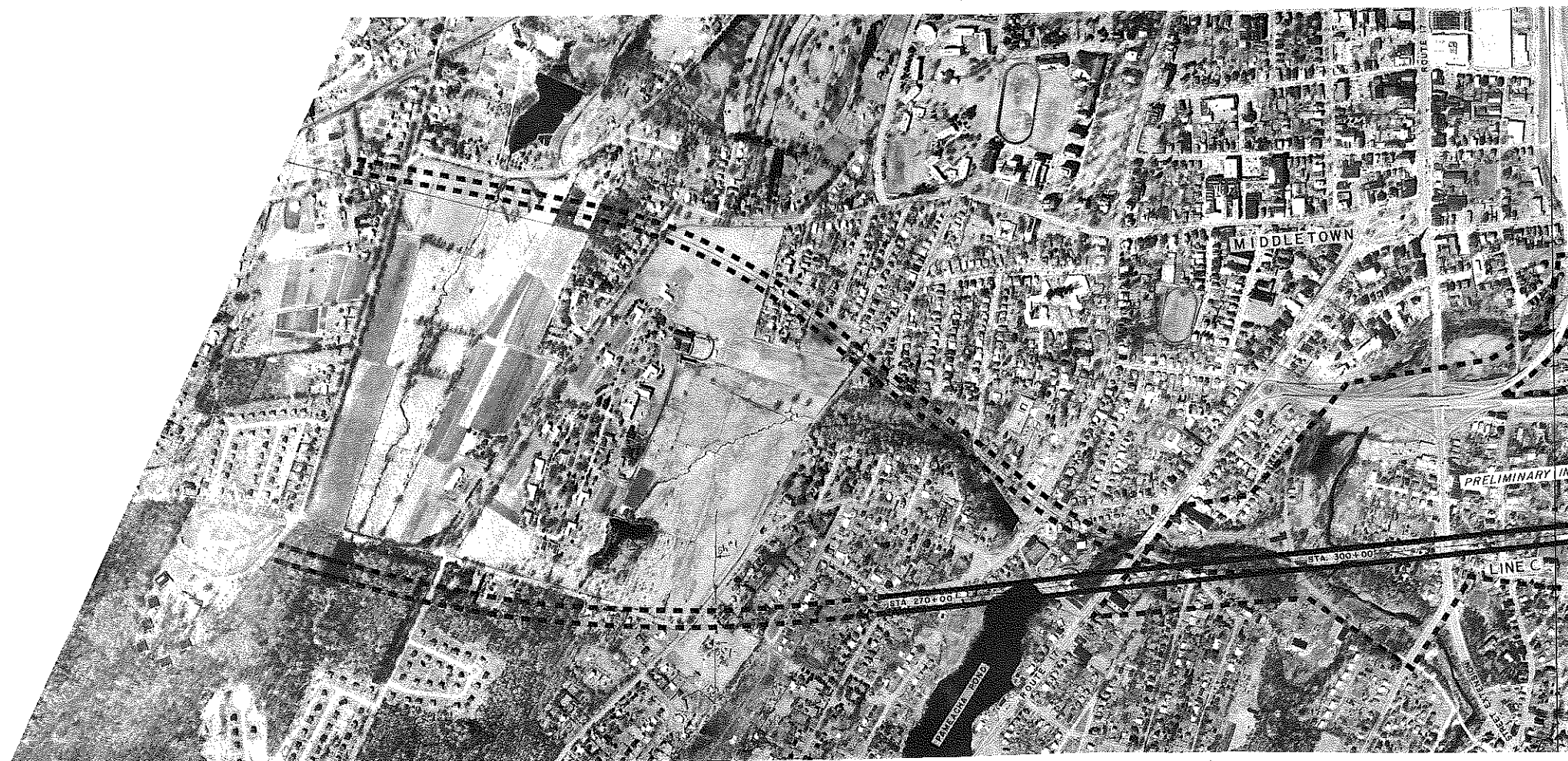


PLAN

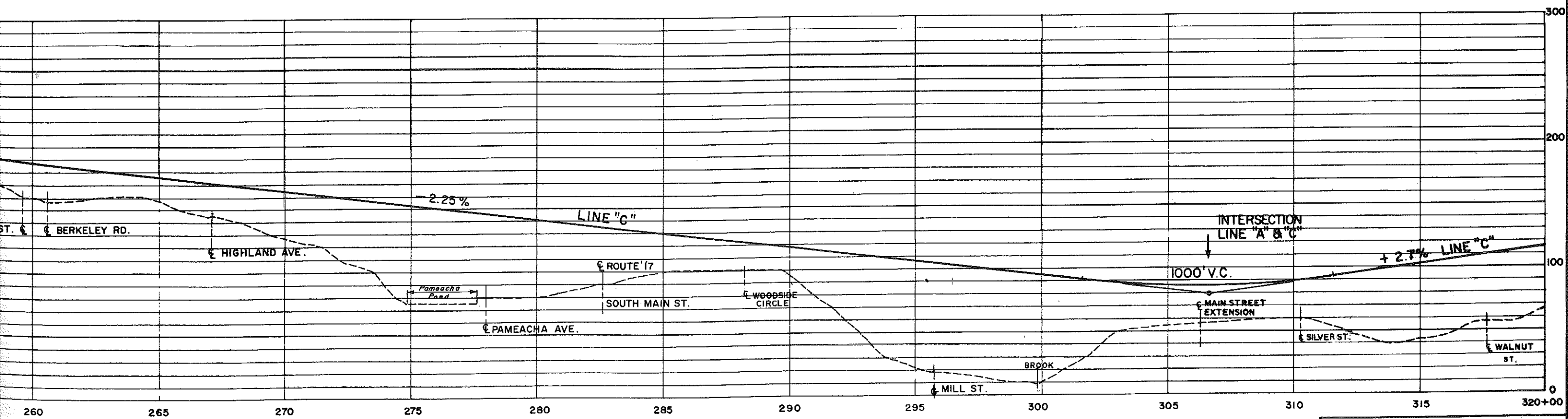


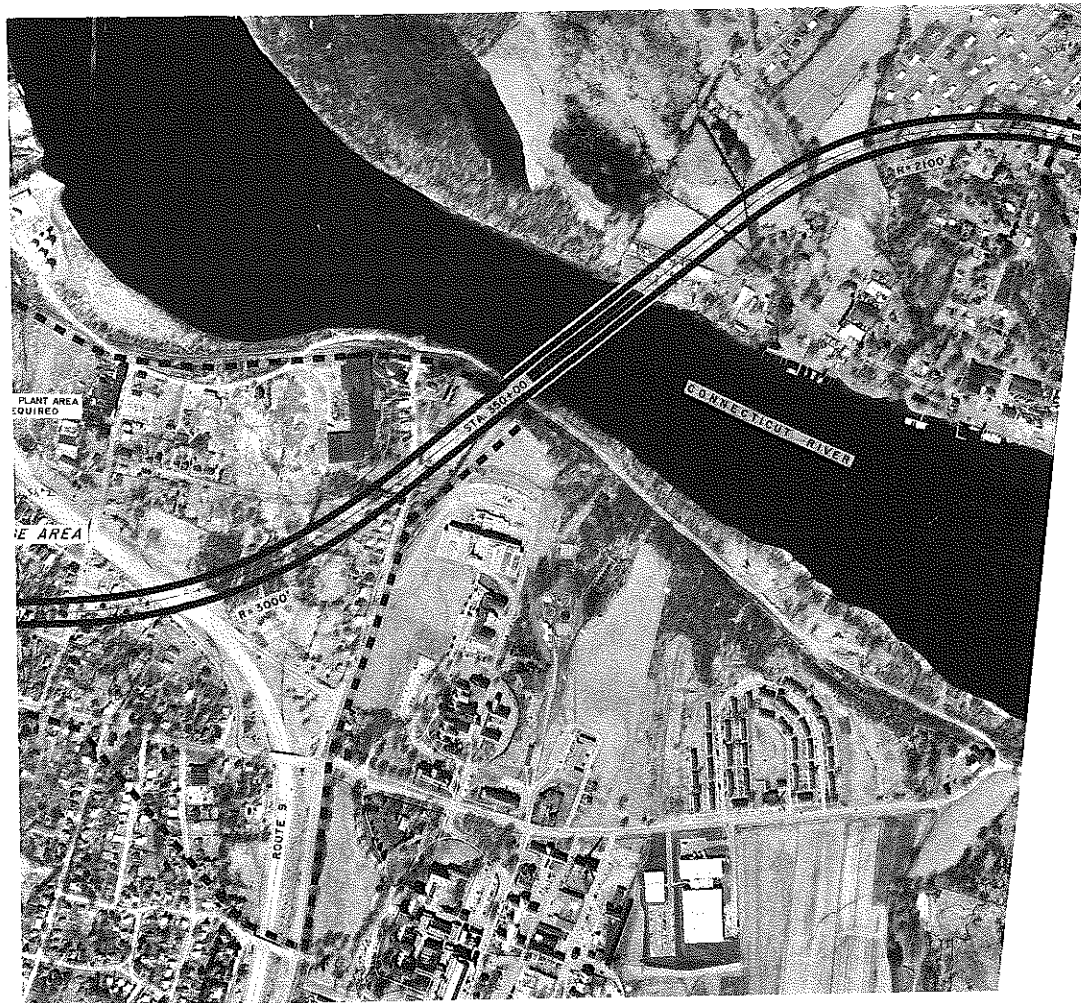
PROFILE

RELOCATION OF SECTION OF ROUTE US 6A
MIDDLETOWN VIC. OF ROUTE 9 TO US 6A IN PORTLAND

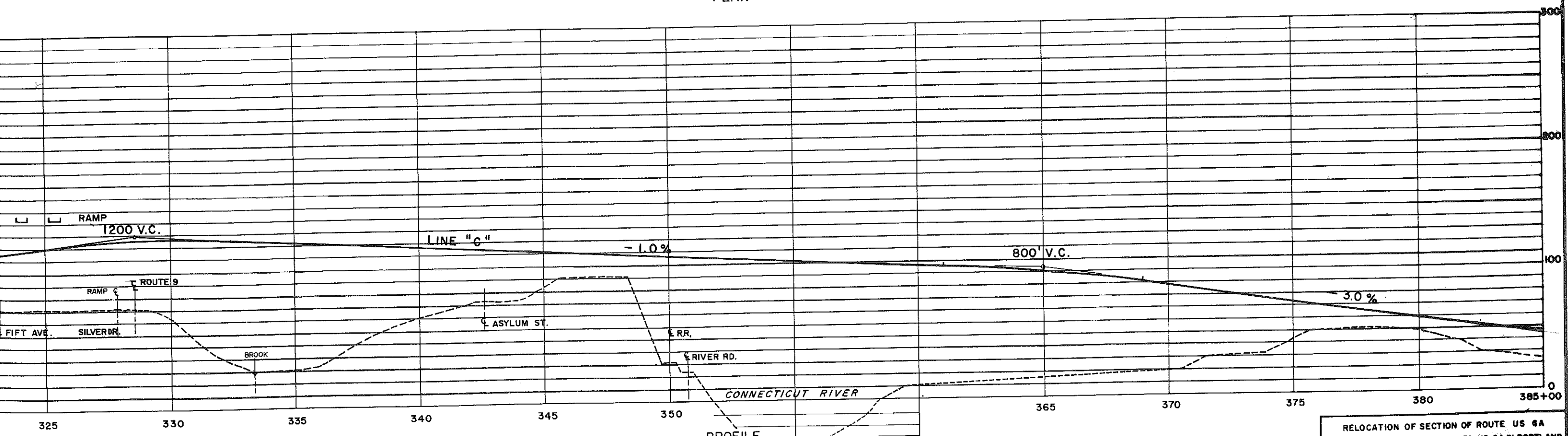


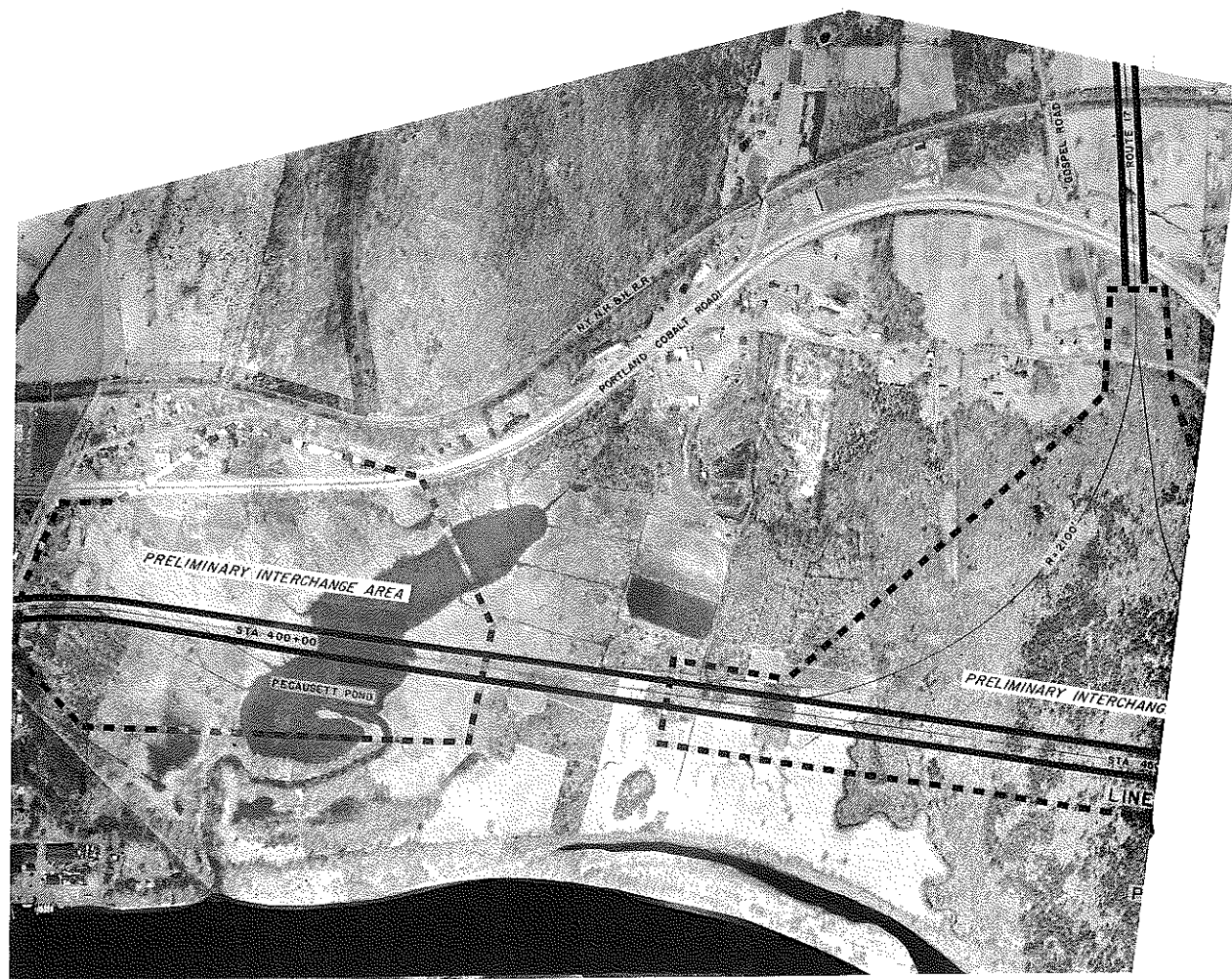
PLAN



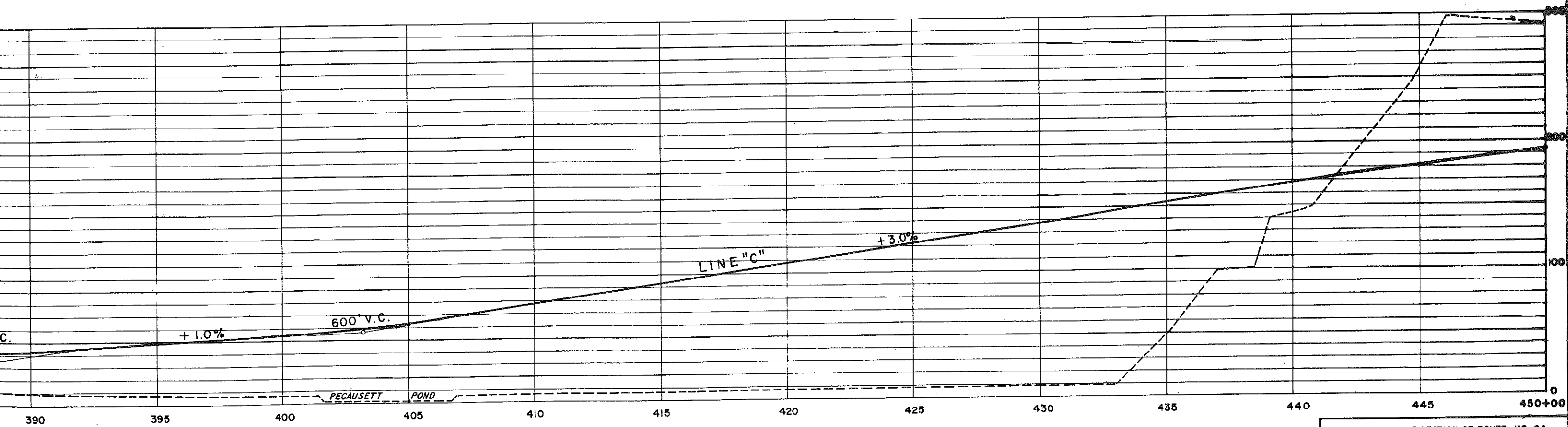


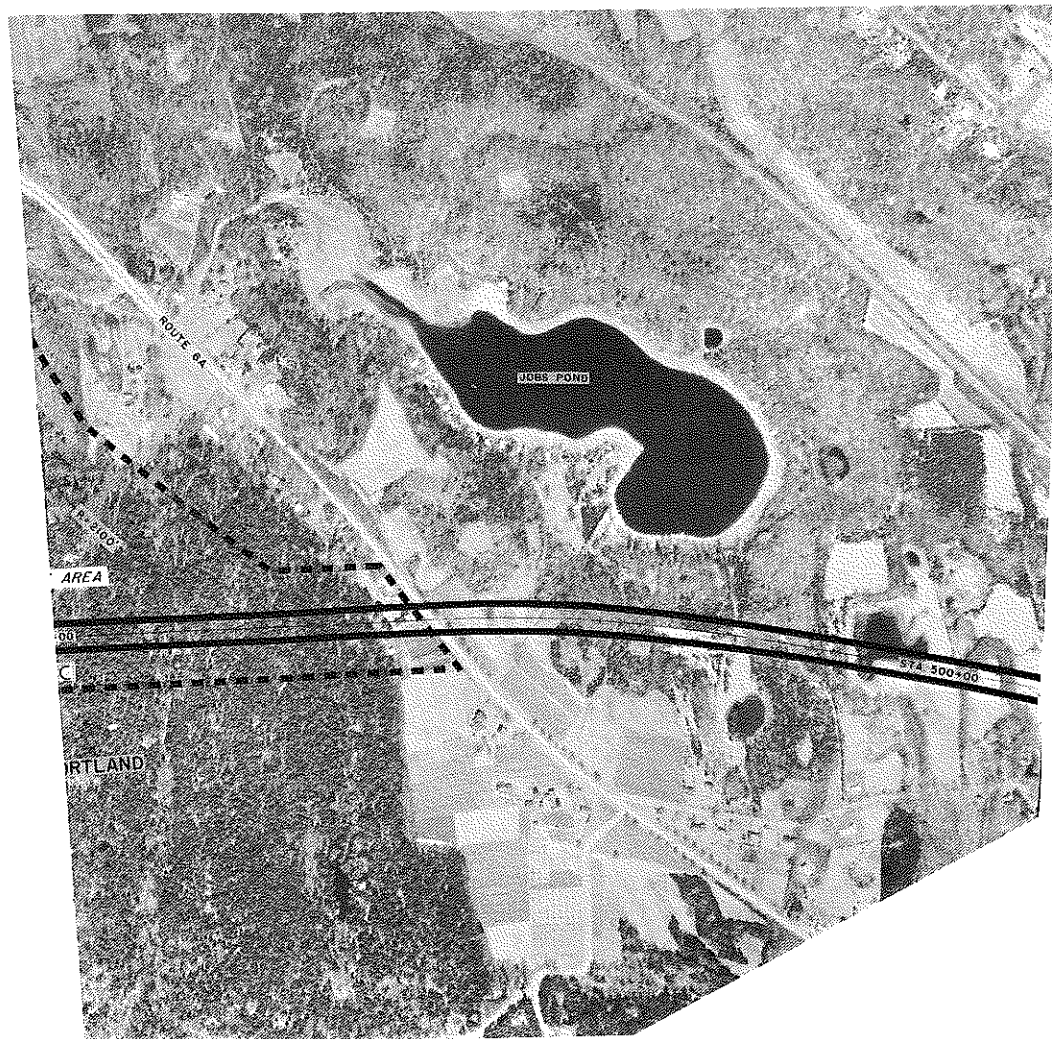
PLAN



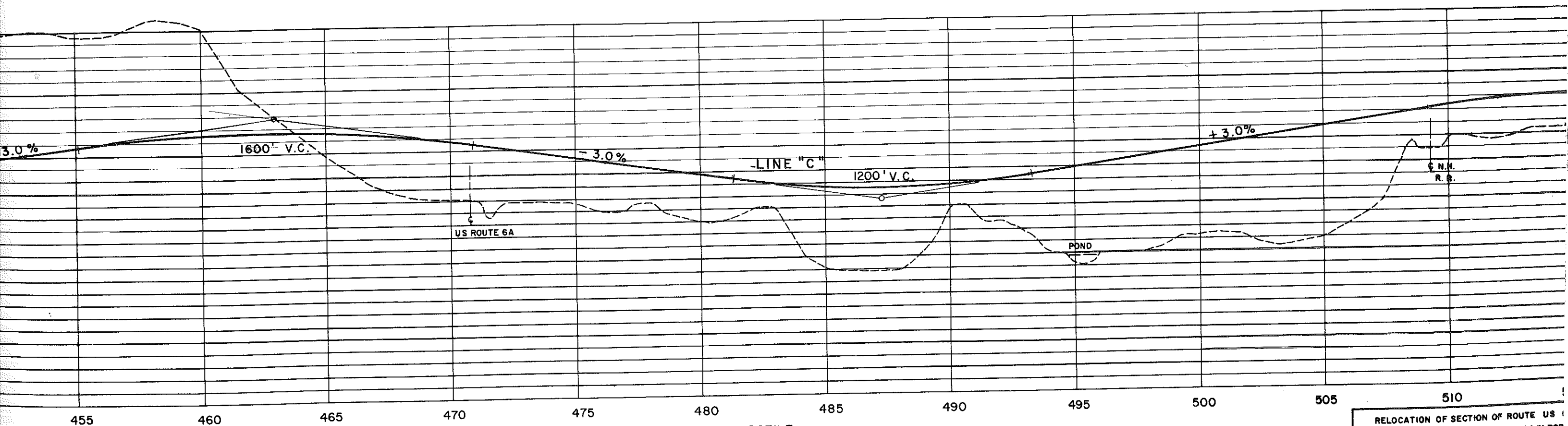


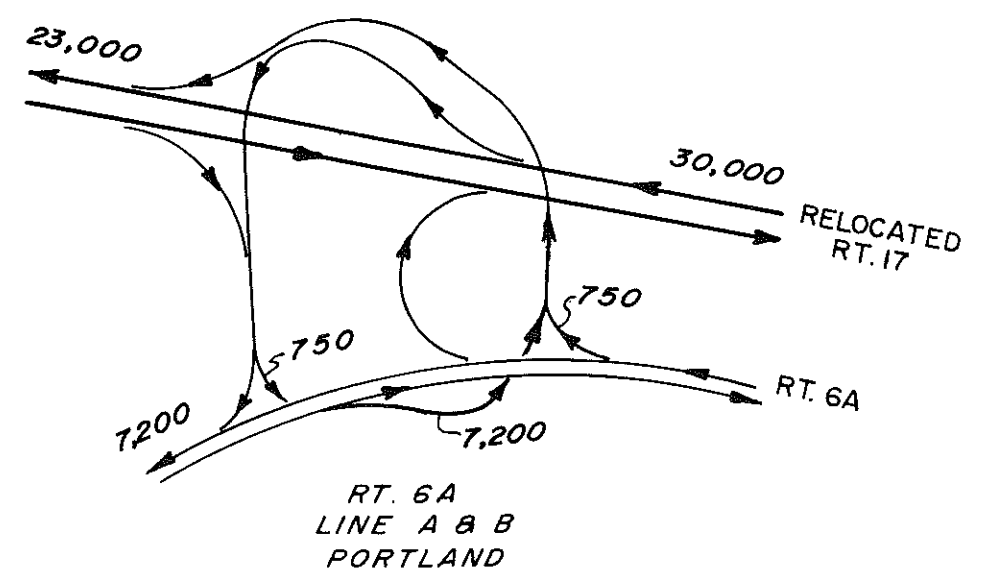
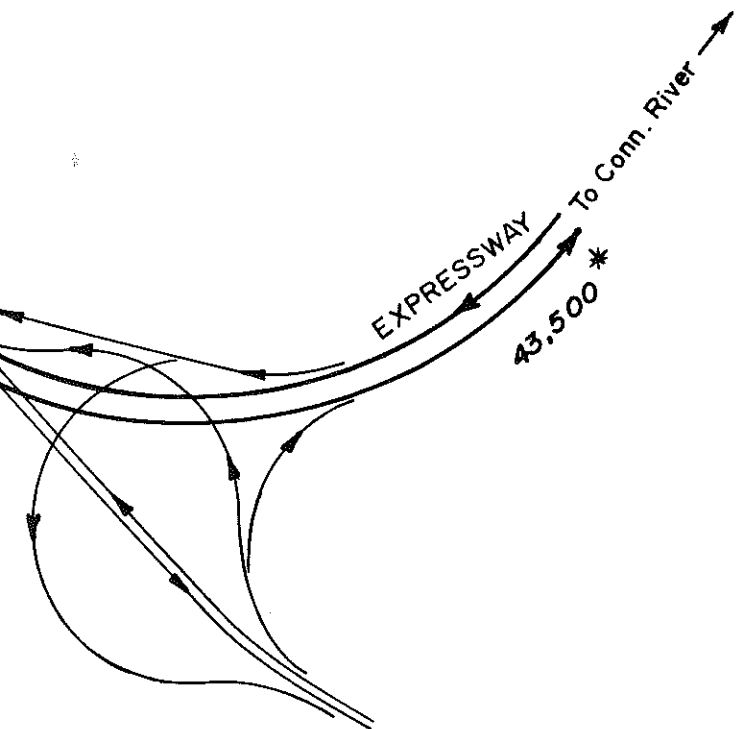
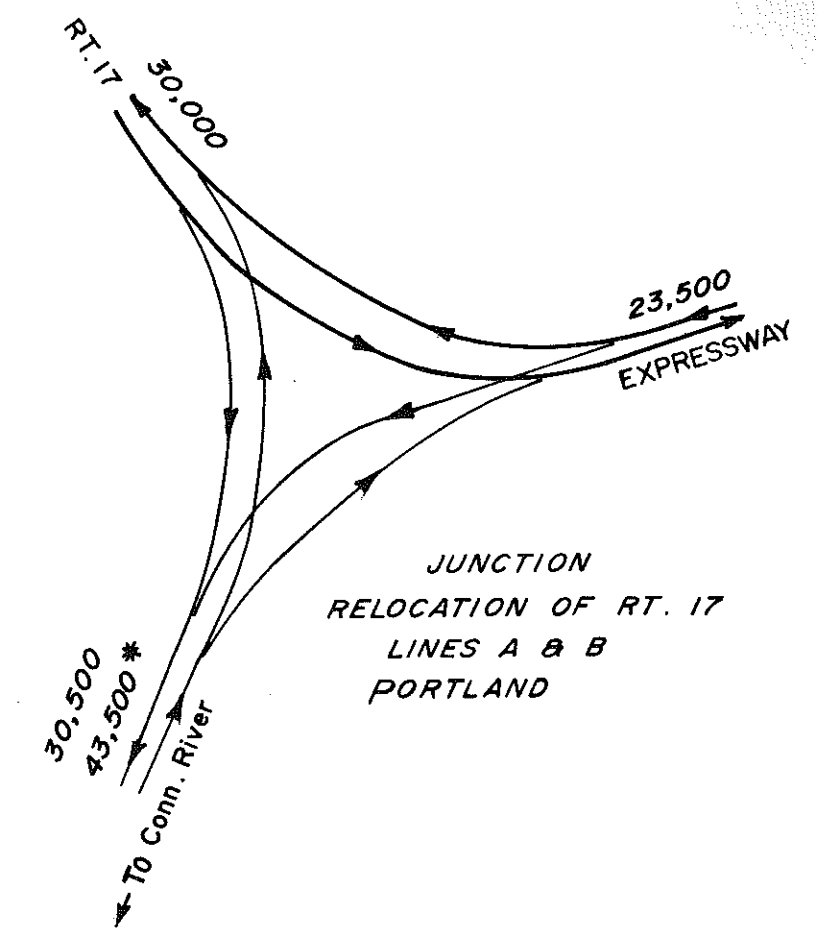
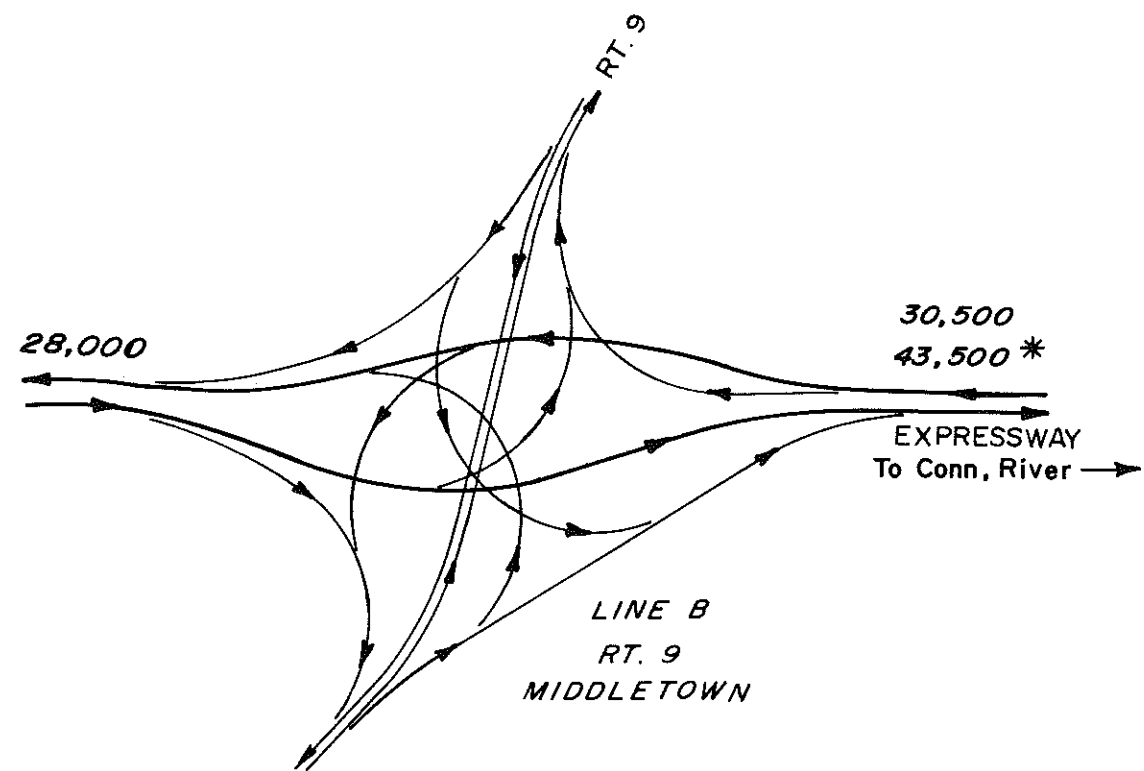
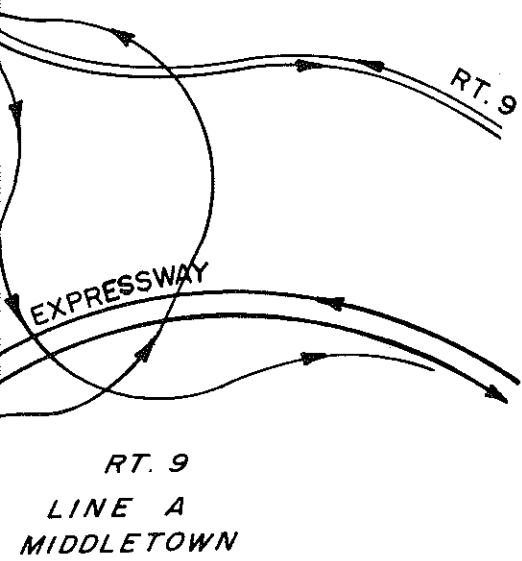
PLAN





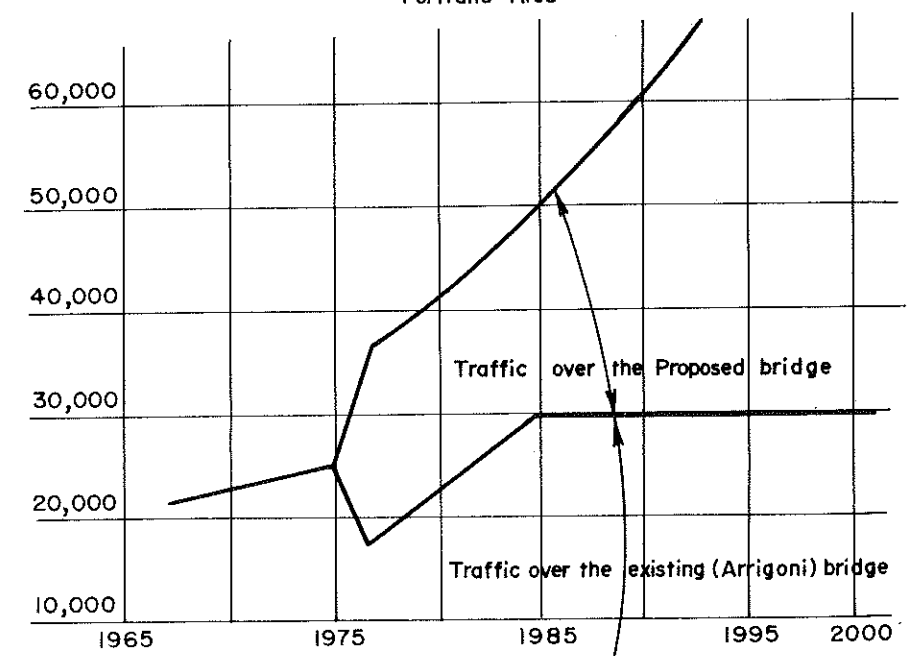
PLAN





Middletown	(Existing)	43,000	Portland
		30,000*	
	Bridge (Arrigoni)		
TRAFFIC (Estimate)			

Crossing the Connecticut River in the Middletown - Portland Area



NOTE:
1995 DDHV (River Crossing) = 43,500 X 0.115 X 0.60 = 3,000.
Lane Requirement - 6 Lane expandable Under Class G urban Residential.

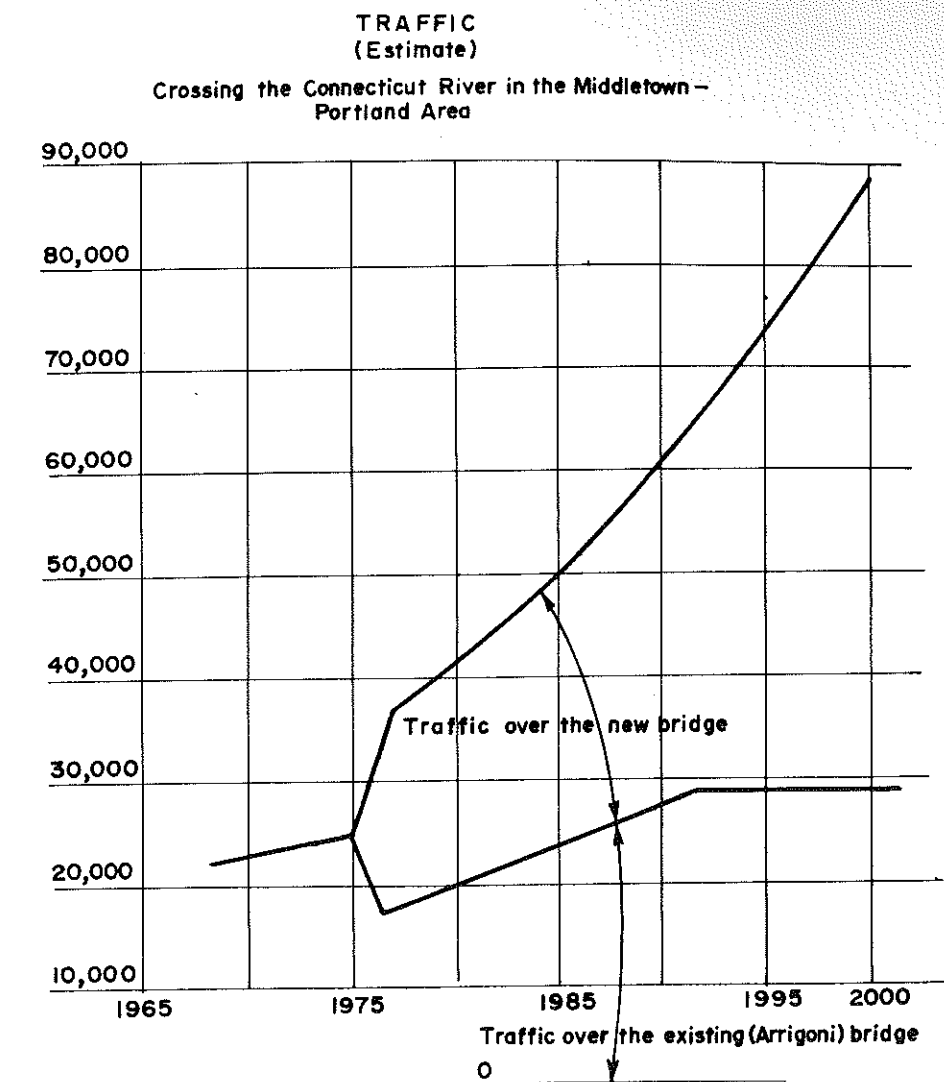
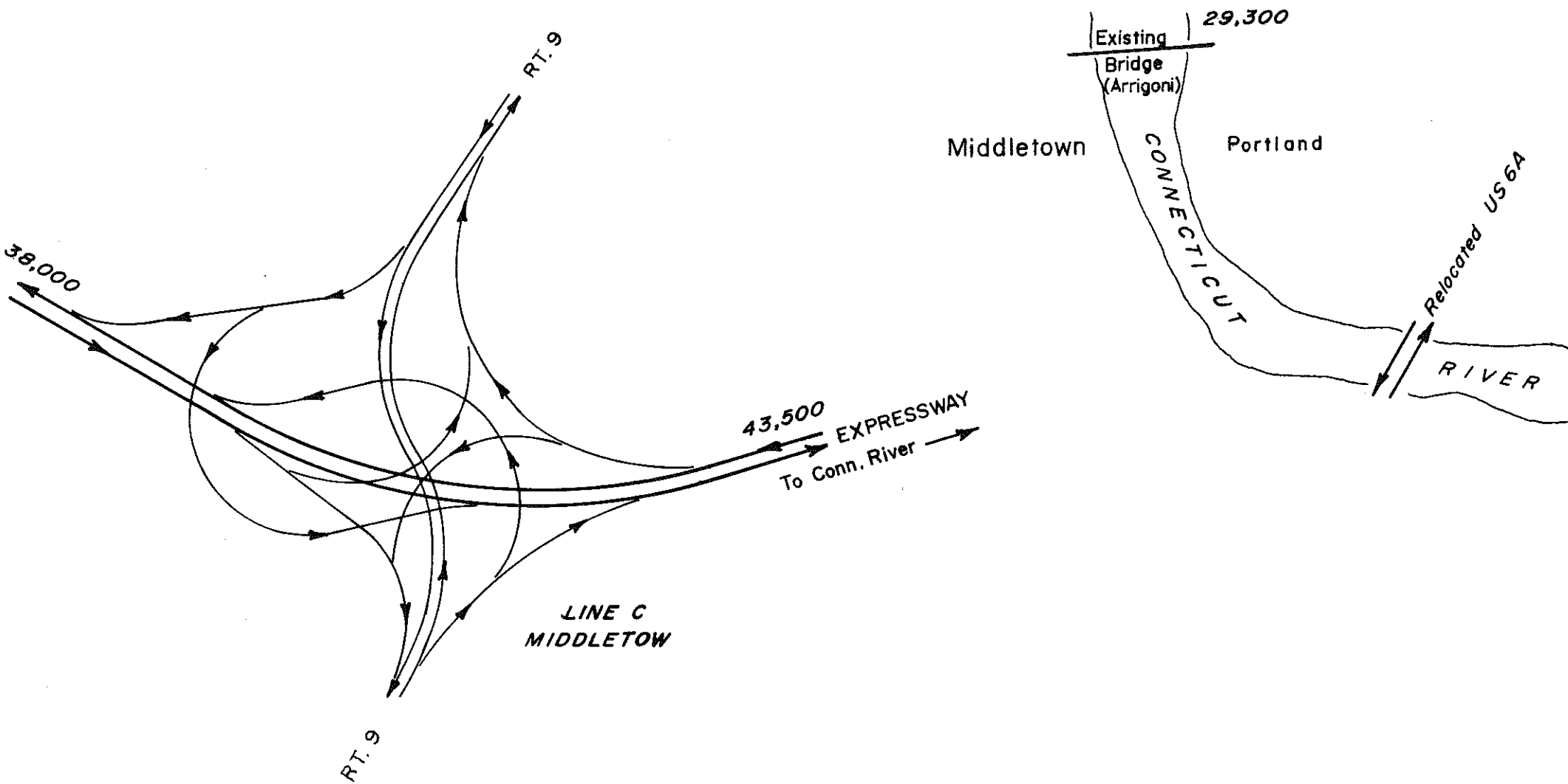
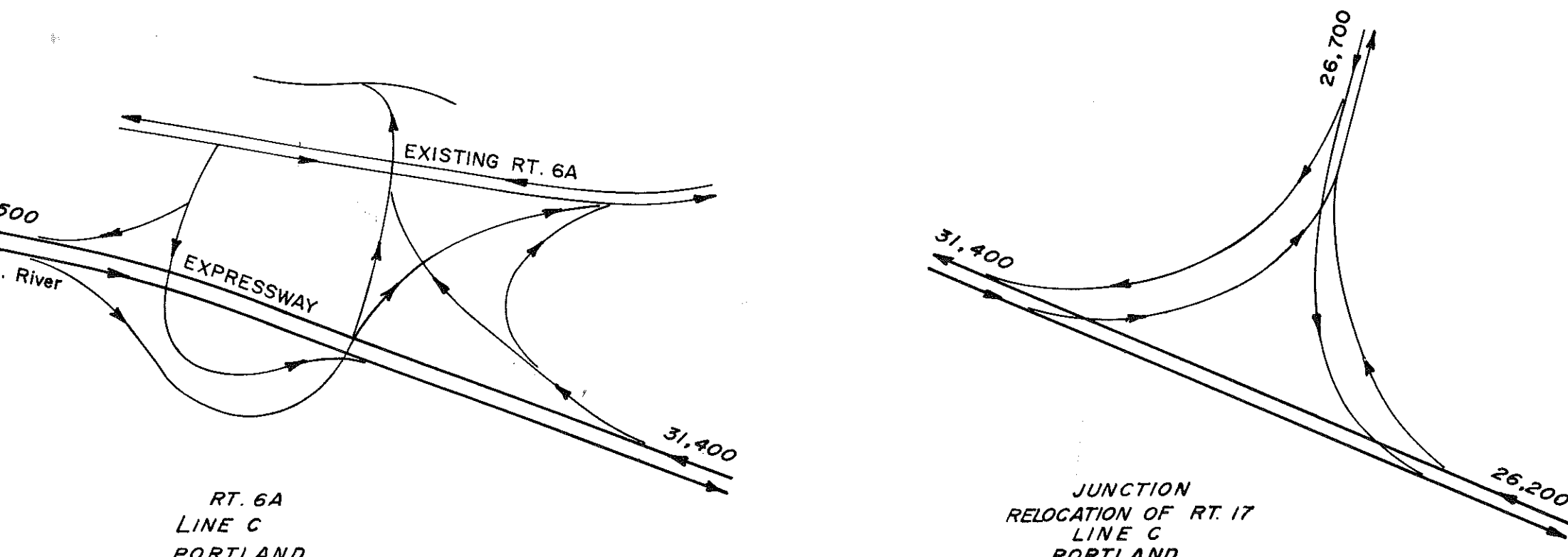
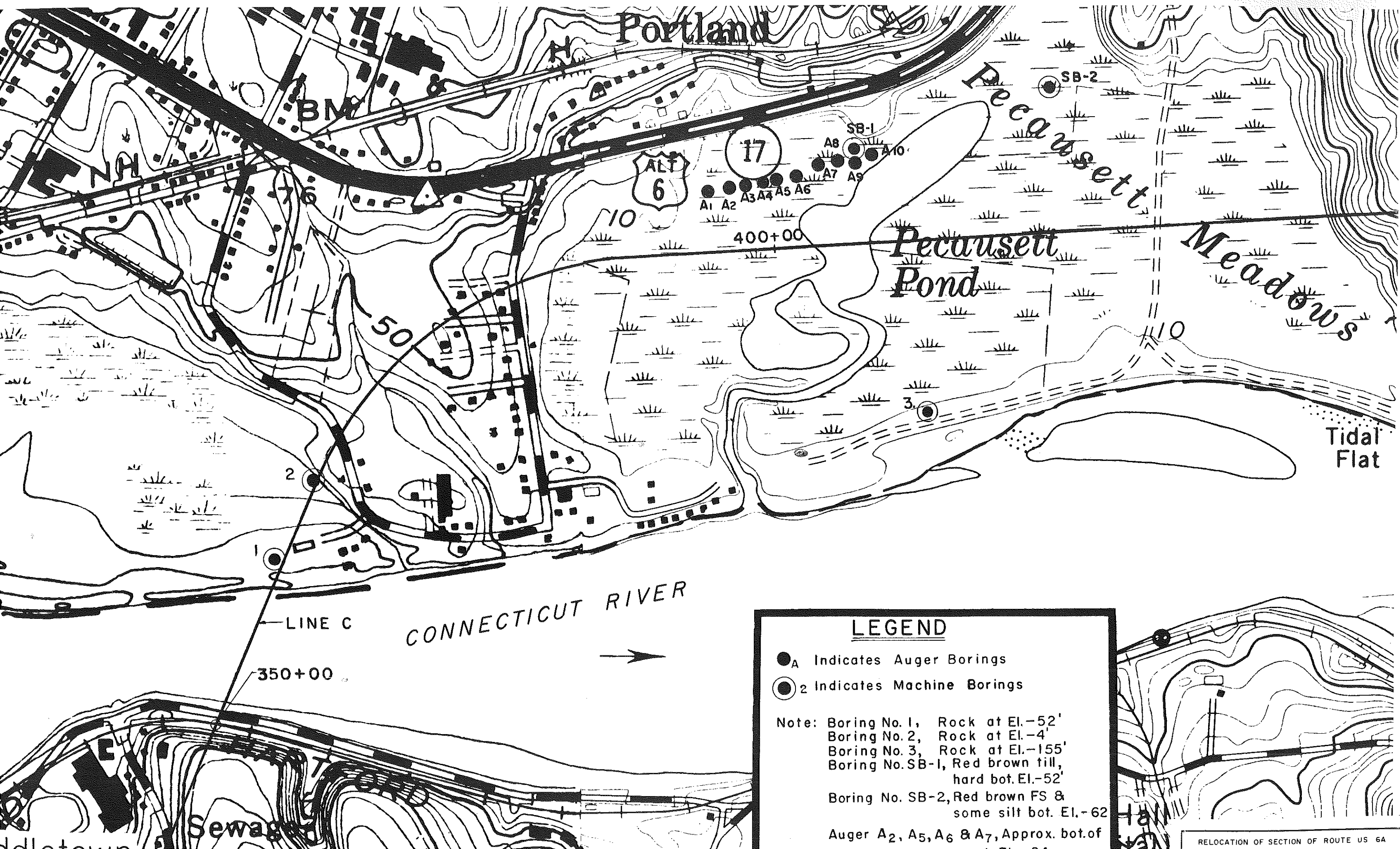


CHART N° 1

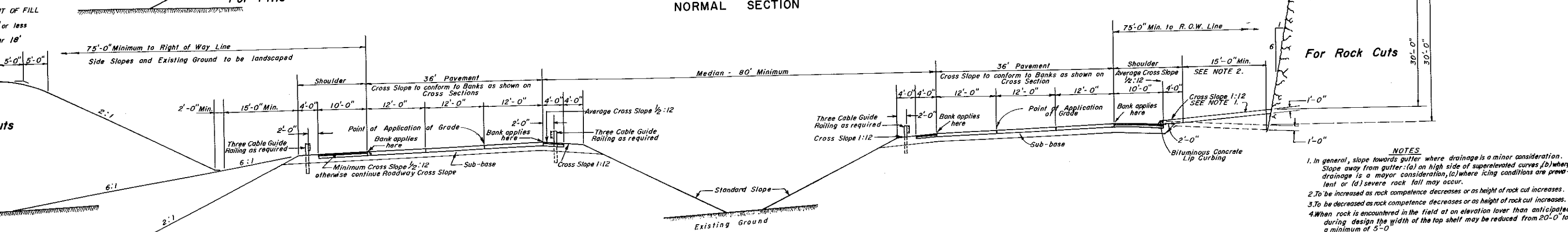
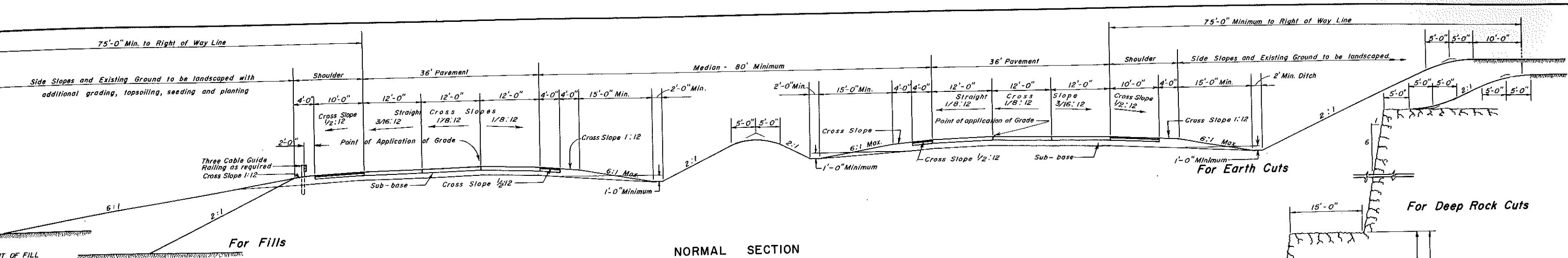




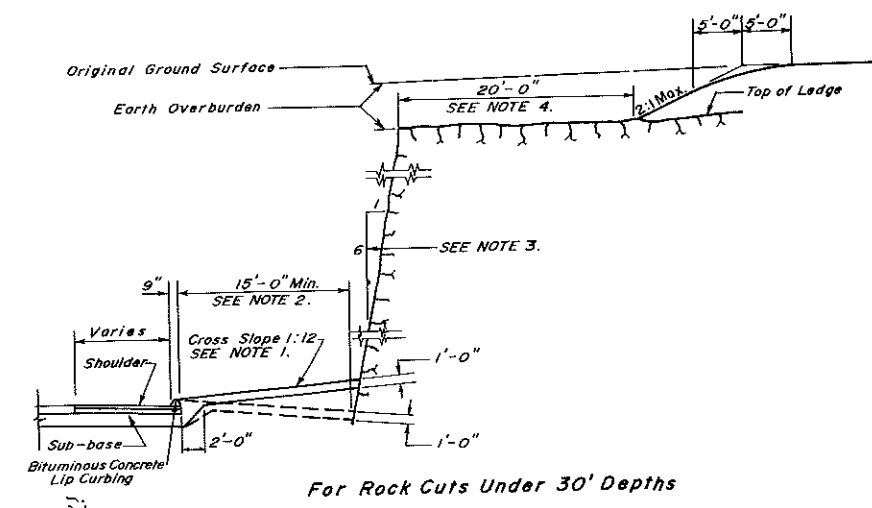
LEGEND

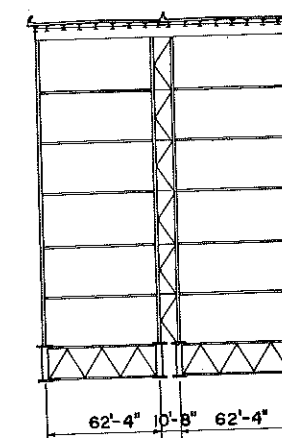
- _A Indicates Auger Borings
- ₂ Indicates Machine Borings

Note: Boring No. 1, Rock at El.-52'
Boring No. 2, Rock at El.-4'
Boring No. 3, Rock at El.-155'
Boring No. SB-1, Red brown till,
hard bot. El.-52'
Boring No. SB-2, Red brown FS &
some silt bot. El.-62'
Auger A₂, A₅, A₆ & A₇, Approx. bot. of

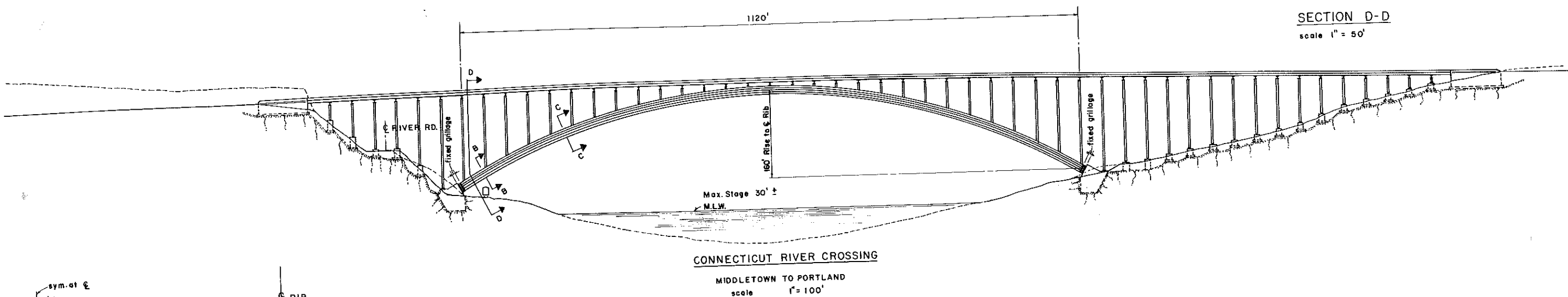


- NOTES**
1. In general, slope towards gutter where drainage is a minor consideration. Slope away from gutter: (a) on high side of superelevated curves, (b) where drainage is a major consideration, (c) where icing conditions are prevalent or (d) severe rock fall may occur.
 2. To be increased as rock competence decreases or as height of rock cut increases.
 3. To be decreased as rock competence decreases or as height of rock cut increases.
 4. When rock is encountered in the field at an elevation lower than anticipated during design the width of the top shelf may be reduced from 20'-0" to a minimum of 5'-0".

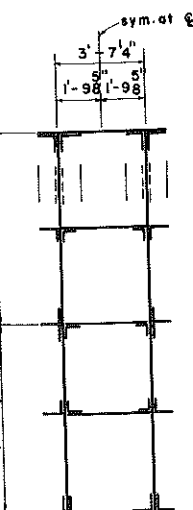




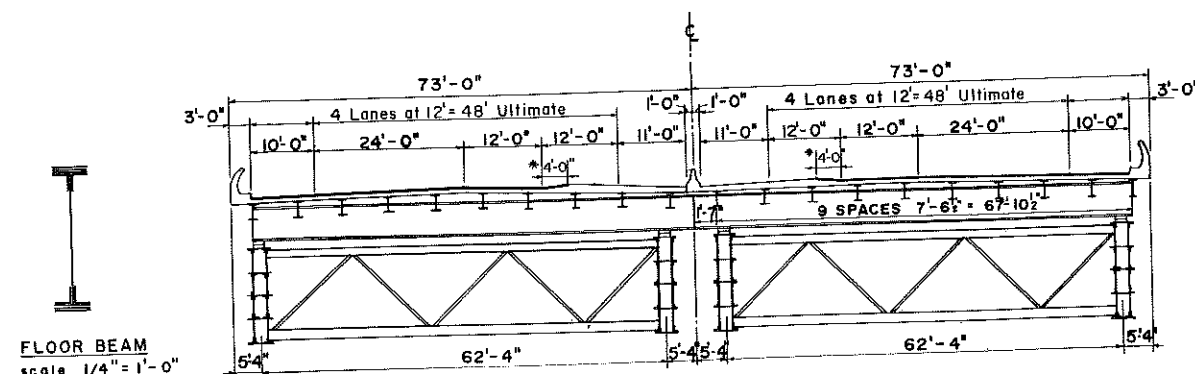
SECTION D-D
scale 1" = 50'



CONNECTICUT RIVER CROSSING
MIDDLETOWN TO PORTLAND
scale 1" = 100'

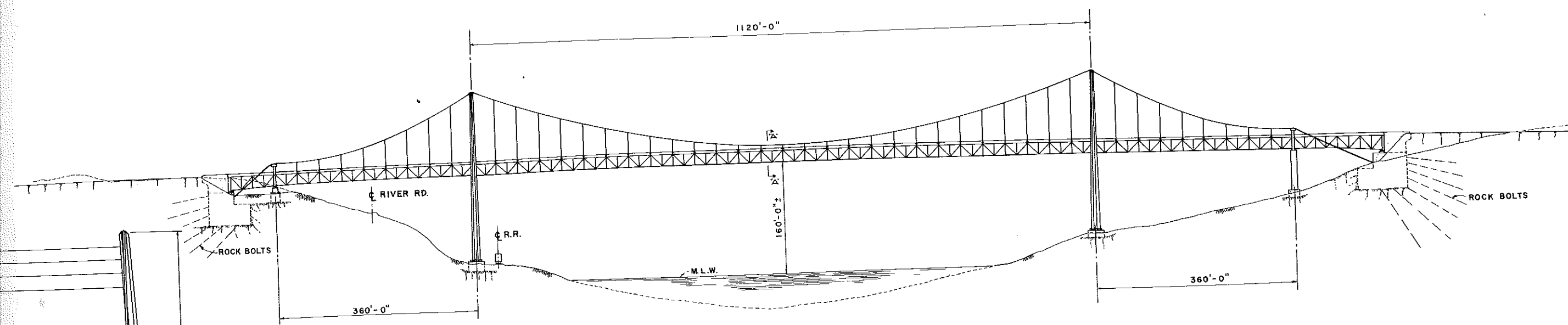


PLATES ADDED TO
SECT. C-C

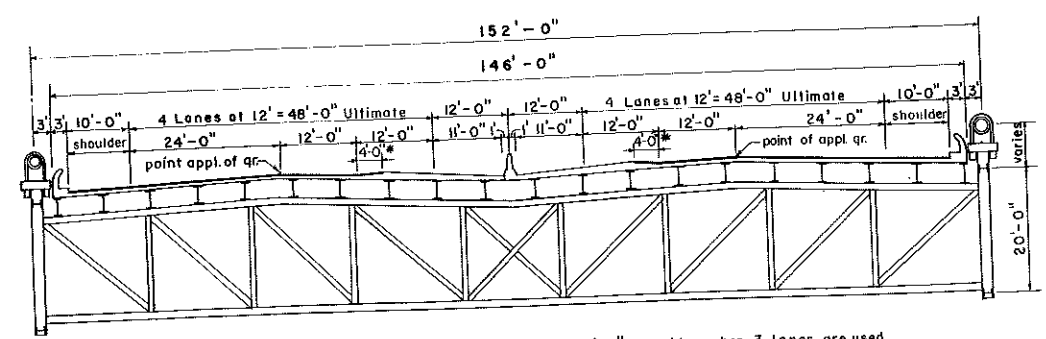


SECTION A-A
scale 1/16" = 1'-0"

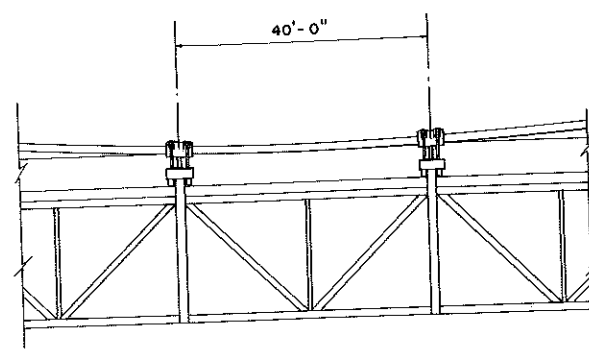
RELOCATION OF SECTION OF ROUTE US 6A
MIDDLETOWN VIC OF ROUTE 9 TO US 6A IN PORTLAND



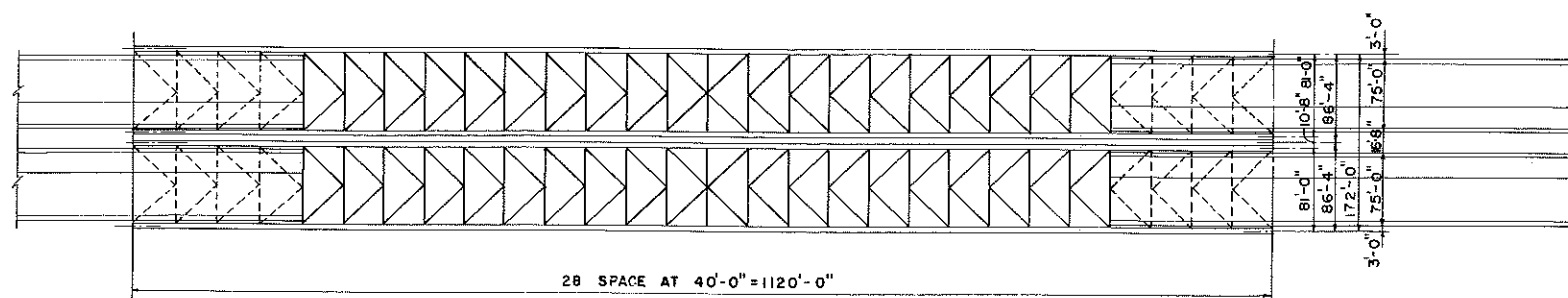
CONNECTICUT RIVER CROSSING
MIDDLETOWN TO PORTLAND
scale 1" = 100'



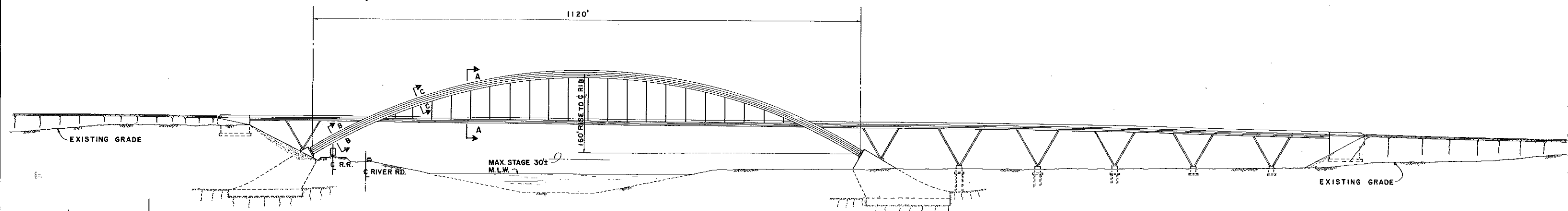
SECTION "A-A"
scale 1/16" = 1'-0"



RELOCATION OF SECTION OF ROUTE US 6A
MIDDLETOWN VIC OF ROUTE 9 TO US 6A IN PORTLAND
SUSPENSION BRIDGE
STUDY ALIGNMENT A&B
NEWMAN, E. ARGRAVES & ASSOC. SCALE 1/16" = 1'-0"

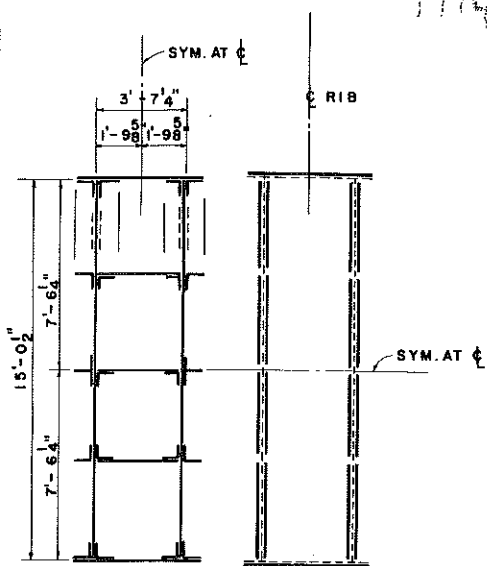


PLAN
SCALE 1"=0'



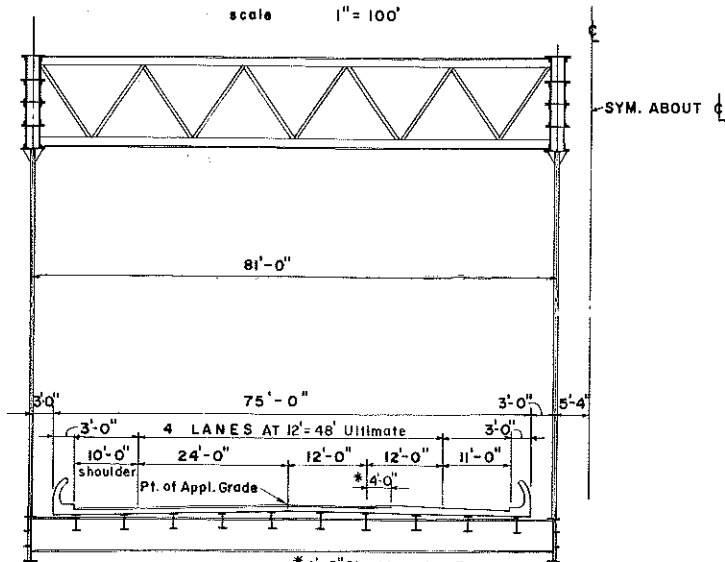
CONNECTICUT RIVER CROSSING

MIDDLETOWN TO PORTLAND
scale 1"=100'



PLATES ADDED TO
SECTION C-C

FLOOR BEAM
1/4" = 1'-0"



SECTION C-C SECTION B-B
SCALE 1/4"=1'-0" SCALE 1/4"=1'-0"

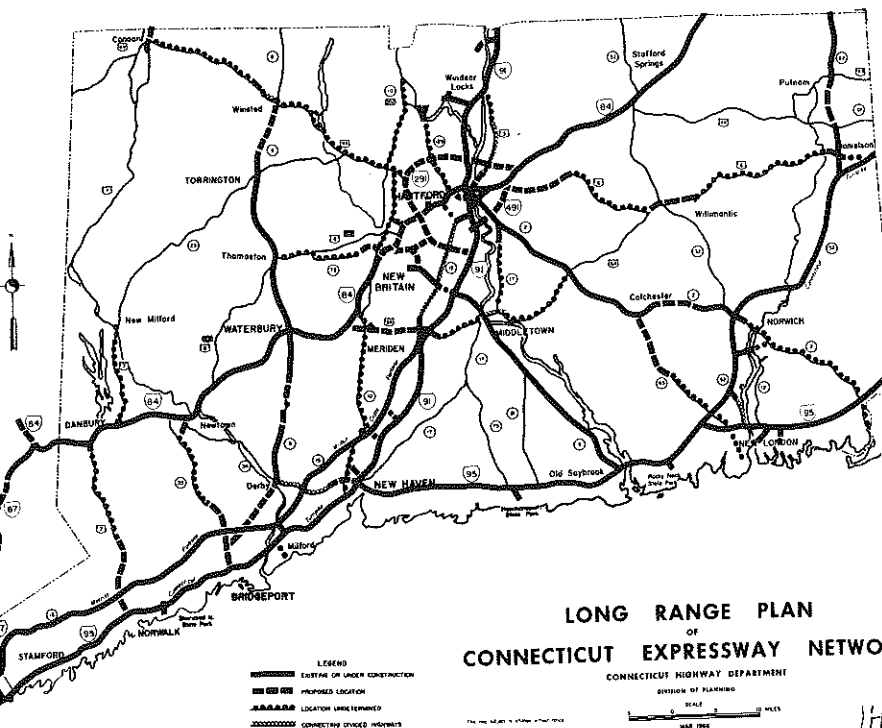
RELOCATION OF SECTION OF R
MIDDLETOWN VIC OF ROUTE 9 TO

APPENDIX

Traffic Study for Relocation of Section of Route US 6A

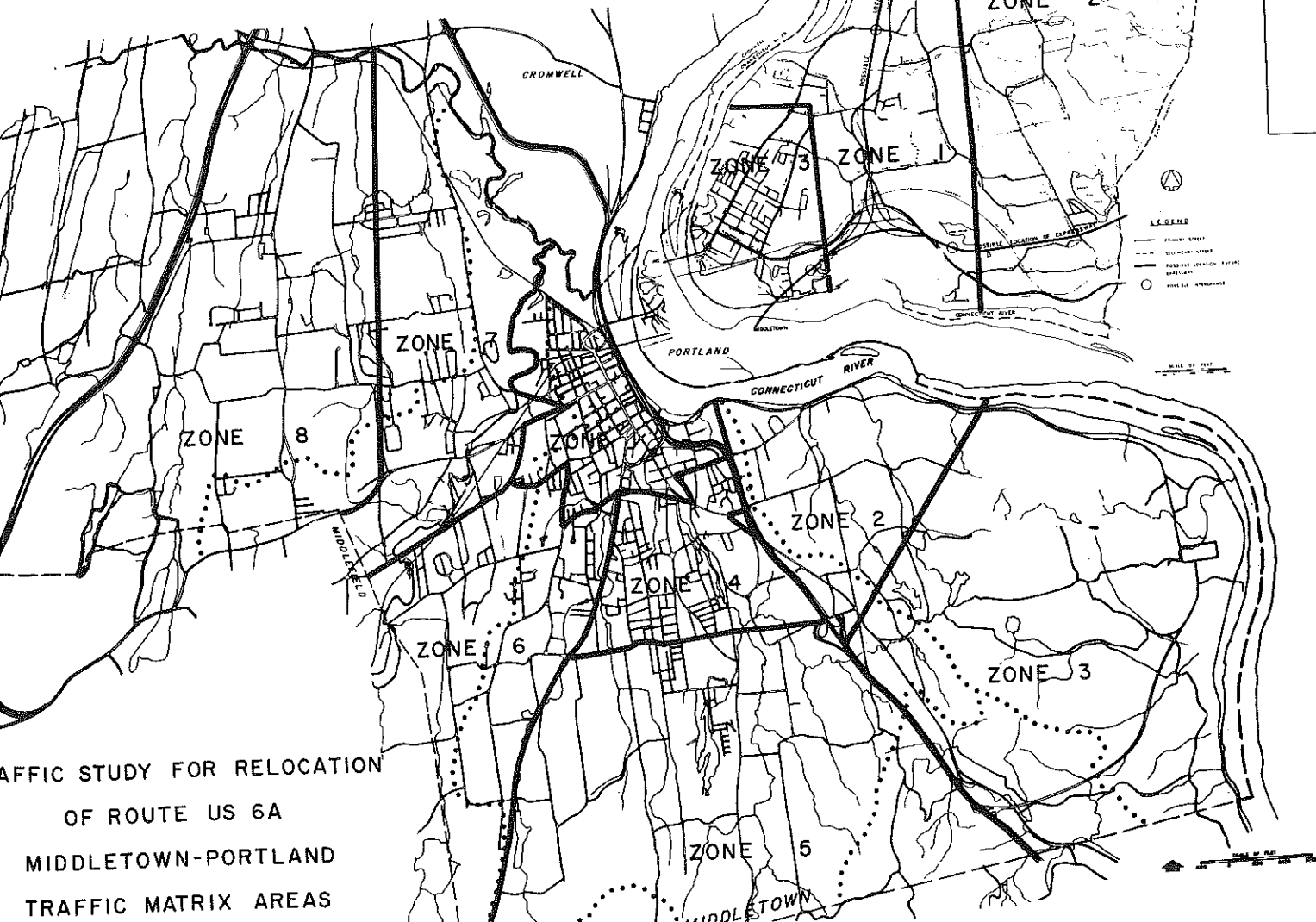
CONNECTICUT RIVER BRIDGE

MIDDLETOWN - PORTLAND



LONG RANGE PLAN
OF
CONNECTICUT EXPRESSWAY NETWORK

Figure 1



TRAFFIC STUDY FOR RELOCATION
OF ROUTE US 6A
MIDDLETOWN-PORTLAND
TRAFFIC MATRIX AREAS



STATE OF CONNECTICUT
STATE HIGHWAY DEPARTMENT
24 WOLCOTT HILL ROAD... P. O. DRAWER A
WETHERSFIELD 9, CONNECTICUT 06109

In reply refer to Unit 402
November 23, 1966

Mr. Newman E. Argraves
Newman E. Argraves & Associates
95 River Street
Milford, Connecticut

Dear Mr. Argraves:

Enclosed is traffic information with respect to the relocation of the U.S. 6A bridge across the Connecticut River between Middletown and Portland. It is important, before discussing the trip tables, to point out various qualifications that apply to the traffic projections.

The first condition concerns Figure 1 showing the long range plan of future Connecticut expressways. All of these have been included in our simulated networks for the year 2000. The relocation of U.S. 6A across the Connecticut River is the new bridge.

The second condition that has been applied in calculating the year 2000 traffic is the fact that the State population for the year 2000 is 5.1 million people. Many people concerned with the future population of the State feel that this projection is somewhat low. At present, further analysis is being made with respect to future population.

A third condition applied to this projection is the fact that the year 2000 population for Middletown is 92,300 and Portland is 29,100.

In our analysis of the traffic we are forwarding to you we have found that by far the greatest factor influencing the traffic on the proposed bridge is the assumption that U.S. 6A and Conn. 17, as previously discussed, are in the expressway system.

Figure 2 is a map of Connecticut which shows the areas that have been grouped for the purpose of simplifying the trip matrices. Both Middletown and Portland are divided up into zones that cannot be shown on this map but can be observed in Figure 3. The zone boundaries and numbers are delineated in red on Figure 3. Town boundary lines (shown as dashed lines) also indicate zone boundaries.

Table A is a two-way total trip matrix regardless of whether or not the trips cross the Connecticut River in the Middletown - Portland area. The top number represents 1960 trips and the bottom number represents the year 2000 trips.

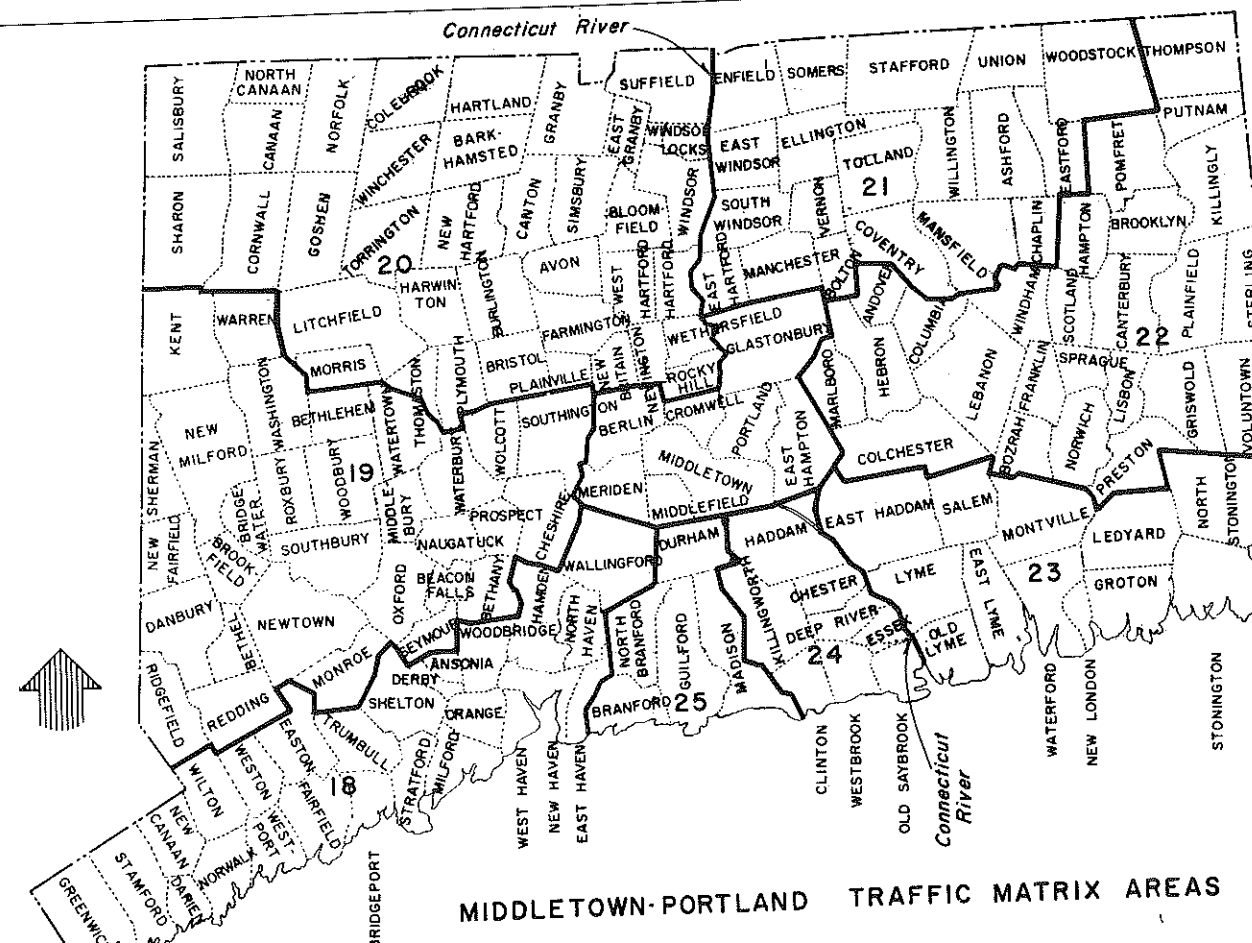
Table B is a trip matrix for the year 2000 which shows the two-way trips by area as outlined in Figures 2 and 3, crossing the proposed bridge and the existing bridge.

If you feel that the explanations above are not sufficient to manipulate the traffic, a representative of your office should visit this office for further explanation. I must reiterate that the traffic volumes in Tables A and B are dependent on the three conditions previously mentioned and, therefore, are preliminary and may be subject to change. I hope you find the information helpful and, if necessary, do not hesitate to contact this office.

Very truly yours,

Howard S. Ives
State Highway Commissioner

Enc.



MIDDLETOWN-PORTLAND TRAFFIC MATRIX AREAS

RELOCATION OF SECTION OF ROUTE 1
MIDDLETOWN VIC. OF ROUTE 9 TO US 6A IN

TRAFFIC STUDY

NEWMAN E. ARGRAVES & ASSOC.,
NEW HAVEN, CT. 06510
SCALE: AS
DRAWN BY:

TRAFFIC STUDY FOR RELOCATION OF ROUTE US 6A

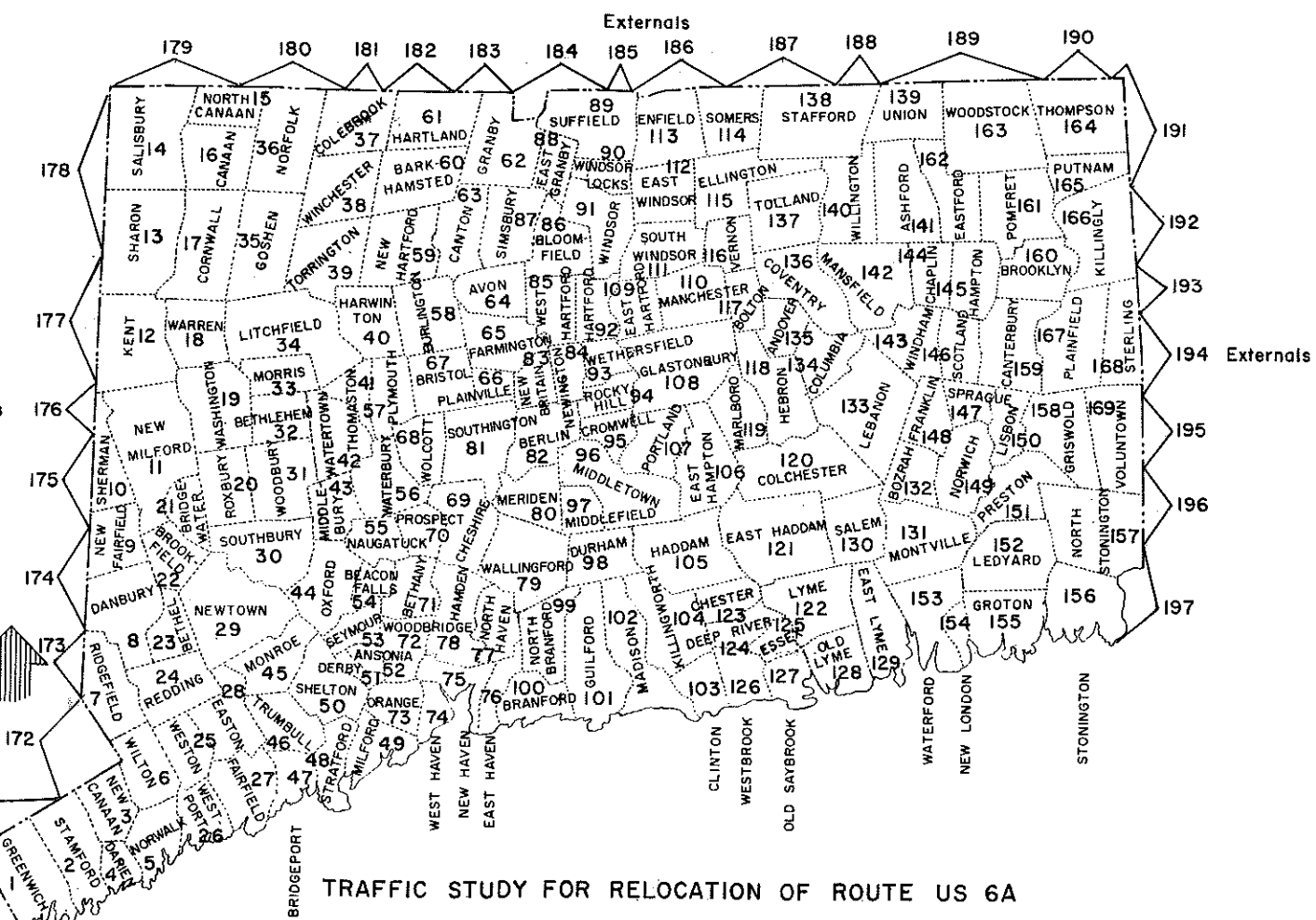
AVERAGE DAILY TRAFFIC OF CROSSINGS OF CONNECTICUT RIVER IN STATE OF CONNECTICUT

TRAFFIC STUDY AVERAGE DAILY TRAFFIC OF CROSSINGS OF CONNECTICUT RIVER IN STATE OF CONNECTICUT												
	PORTLAND ZONE 1	PORTLAND ZONE 2	PORTLAND ZONE 3	EAST HAMPTON	GLASTONBURY	MAP AREA 21	MAP AREA 22	MAP AREA 23	MAP AREA 24	MAP AREA 25	TOTAL	
TOWN 1	399 1,704	225 681	5,161 6,267	496 748	363 908	536 1,406	361 690	252 412	951 1,343	797 1,558	9,541 15,709	YR. 1960 YR. 2000
TOWN 2	66 1,401	29 506	658 1,110	76 525	59 660	109 930	66 441	60 271	272 1,024	169 1,103	1,564 7,971	YR. 1960 YR. 2000
TOWN 3	27 270	14 127	142 220	57 174	38 211	101 507	82 293	120 322	537 1,634	136 486	1,254 4,244	YR. 1960 YR. 2000
TOWN 4	82 938	35 298	779 940	96 334	79 429	139 710	93 326	82 235	421 950	286 908	2,092 6,068	YR. 1960 YR. 2000
TOWN 5	20 631	7 257	177 668	24 277	26 387	48 828	31 346	37 330	206 1,710	177 2,089	753 7,523	YR. 1960 YR. 2000
TOWN 6	51 851	24 276	493 676	56 305	52 396	96 683	49 337	61 232	194 645	390 1,929	1,466 6,330	YR. 1960 YR. 2000
TOWN 7	56 619	32 259	662 1,311	74 241	57 331	99 869	86 333	46 252	124 556	213 1,403	1,449 6,174	YR. 1960 YR. 2000
TOWN 8	18 513	9 179	179 810	26 223	20 369	74 1,481	34 411	23 272	52 513	75 1,120	510 5,891	YR. 1960 YR. 2000
LEFIELD	21 575	11 248	183 459	29 287	28 373	91 858	45 408	49 289	96 670	543 4,311	1,096 8,478	YR. 1960 YR. 2000
IDEN	64 1,190	29 526	381 943	124 709	148 1,005	1,051 3,840	285 1,514	210 1,085	337 1,746	1,012 5,210	3,641 17,768	YR. 1960 YR. 2000
ILIN	31 459	15 226	205 845	60 282	103 888	914 4,298	118 780	82 453	106 670	134 899	1,768 9,800	YR. 1960 YR. 2000
OMWELL	109 1,205	55 493	1,619 2,863	126 474	106 946	311 3,604	109 724	91 418	217 991	162 1,144	2,905 12,862	YR. 1960 YR. 2000
AP AREA 18	96 1,126	64 636	411 905	247 1,115	301 1,519	1,928 8,551	862 3,992	2,388 5,203	3,187 8,421	40,811 111,356	50,295 142,824	YR. 1960 YR. 2000
AP AREA 19	41 816	32 503	173 720	117 831	161 1,581	1,350 11,474	268 3,575	267 2,240	555 3,028	1,522 8,503	4,486 33,271	YR. 1960 YR. 2000
AP AREA 20	352 3,347	167 1,943	1,313 3,500	705 2,816	7,075 26,851	127,588 349,605	4,734 23,814	1,220 7,872	1,225 6,983	1,373 8,056	145,752 434,787	YR. 1960 YR. 2000
AP AREA 23	50 343	43 429	143 296	597 1,524	228 1,037	1,959 7,372	26,011 80,853	7,521 23,197	7,521 23,197	1,221 3,804	37,773 118,855	YR. 1960 YR. 2000
AP AREA 24	44 694	38 560	291 651	271 1,055	126 667	451 2,785	1,127 3,476		7,521 23,197	5,341 19,054	15,210 52,139	YR. 1960 YR. 2000
AP AREA 25	31 715	18 334	192 610	57 465	91 668	327 2,741	400 1,835		1,221 3,804	5,411 19,054	7,748 22,226	YR. 1960 YR. 2000
TOTAL	1,558 17,397	847 8,481	13,162 23,794	3,238 12,385	9,061 39,226	137,172 402,542	34,761 124,148	13,730 46,887	73,135	172,933	289,303 912,920	YR. 1960 YR. 2000

TABLE B

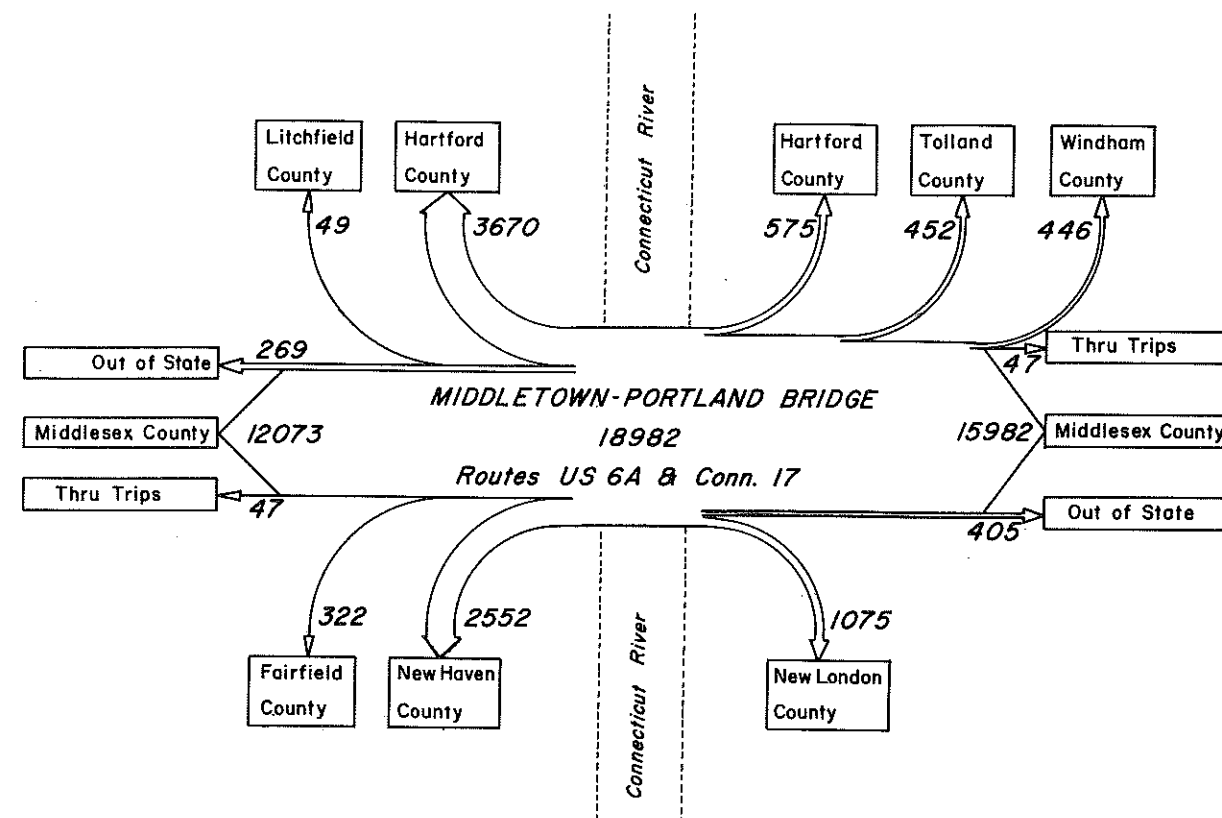
TRAFFIC STUDY FOR RELOCATION OF ROUTE US 6A
PROJECTED TWO WAY AVERAGE DAILY TRAFFIC FOR YEAR 2000

Proposed Relocation of Route US 6A										Route US 6A(Present)		
	PORTLAND	EAST HAMPTON	GLASTONBURY	MAP AREA 21	MAP AREA 22	MAP AREA 23	MAP AREA 24	MAP AREA 25	SUBTOTAL		PORTLAND	TOTAL
MIDDLETOWN	10,072	2,827	3,489	4,643	3,008	927	441	0	25,407		11,440	36,847
MIDDLEFIELD	823	287	373	444	363	207	45	0	2,542		459	3,001
MERIDEN	1,716	709	587	0	1,102	788	131	0	5,033		943	5,976
BERLIN	459	282	0	0	304	324	50	0	1,419		1,071	2,490
CROMWELL	1,205	474	279	0	419	286	75	0	2,738		3,356	6,094
MAP AREA 18	1,762	1,063	703	0	2,225	716	234	0	6,703		905	7,608
MAP AREA 19	1,302	831	495	0	1,912	1,056	369	0	5,965		737	6,702
MAP AREA 20	1,164	1,241	0	0	0	2,526	409	0	5,340		4,181	9,521
MAP AREA 21	0	0	0	0	0	0	0	0	0		49	49
MAP AREA 22	0	0	0	0	0	0	0	0	729		30	759
MAP AREA 23	31	0	135	563	0	0	0	0	0		538	4,347
MAP AREA 24	786	158	555	2,129	86	0	0	95	3,809		610	5,269
MAP AREA 25	1,049	461	626	1,640	754	129	0	0	4,659		24,319	88,663
TOTAL	20,369	8,333	7,242	9,419	10,173	6,959	1,754	95	64,344			



TRAFFIC STUDY FOR RELOCATION OF ROUTE US 6A

COMPUTER NUMBERS FOR ZONES



TRAFFIC STUDY FOR RELOCATION OF ROUTE US 6A
1960 AVERAGE DAILY TRAFFIC
FROM ROADSIDE ORIGIN & DESTINATION COUNT (1963)

TRAFFIC STUDY FOR RELOCATION OF ROUTE US 6A
GROWTH RATE STATISTICS

YEAR	AVERAGE DAILY TRAFFIC	POPULATION		TAXABLE MOTOR VEHICLES	
		MIDDLETOWN	PORTLAND	MIDDLETOWN	PORTLAND
1947	8,300				
1949	10,400				
1950	11,300	20,711	5,186	8,512	2,076
1951	12,300				
1953	16,000	6% Year	5% Year	4.5% Year	7.9% Year
1955	20,800				
1960	19,000	33,250	7,800	12,337	3,718
1962	19,200				
1964	20,000				